

Service Manual

ViewSonic VA521 VE510b/s-2

Model No. VLCDS27996-1W

Model No. VLCDS27996-2W/-3W

15" Color TFT LCD Display

(VA521/VE510b/s-2_SM_819_1c Rev. 1c Oct. 2004)

ViewSonic® 381 Brea Canyon Road, Walnut, California 91789 USA - (800) 888-8583

Copyright

Copyright © 2004 by ViewSonic Corporation. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of ViewSonic Corporation.

Disclaimer

ViewSonic makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranty of merchantability or fitness for any particular purpose. Further, ViewSonic reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation of ViewSonic to notify any person of such revision or changes.

Trademarks

Optquest is a registered trademark of ViewSonic Corporation.

ViewSonic is a registered trademark of ViewSonic Corporation.

All other trademarks used within this document are the property of their respective owners.

Revision History

Revision	SM Editing Date	Documents Number		Description of Changes	Editor
		DCN Number	ECR Number		
1a	02/11/04	4207		Initial Release	A. Lu
1b	04/05/04	4280		Add VE510b/s-2	A. Lu
1c	10/25/04	4777	4701	Change Scaler from MST P/N: 2365929596 To RealTek 2013 P/N: 2365930996	A. Lu

TABLE OF CONTENTS

1. Precautions and Safety Notices	1
2. Specification	2
3. Front Panel Function Control Description	5
4. Circuit Description	10
5. Adjusting Procedure	16
6. Trouble Shooting Flow Chart	17
7. Recommended Spare Parts List	19
8. Exploded Diagram And Spare Parts List	35
9. Block Diagram	44
10. Schematic Diagrams	45
11. PCB Layout Diagrams	51

1. Precautions and Safety Notices

1.1 SAFETY PRECAUTIONS

This monitor is manufactured and tested on a ground principle that a user's safety comes first. However, improper use or installation may cause damage to the monitor as well as to the user. Carefully go over the following WARNINGS before installing and keep this guide handy.

WARNINGS

- This monitor should be operated only at the correct power sources indicated on the label on the rear end of the monitor. If you're unsure of the power supply in your residence, consult your local dealer or power company.
- Do not try to repair the monitor your self as it contains no user-serviceable parts. This monitor should only be repaired by a qualified technician.
- Do not remove the monitor cabinet. There are high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is unplugged.
- Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- Put your monitor only in a clean, dry environment. If it gets wet, unplug the power cable immediately and consult your service technician.
- Always unplug the monitor before cleaning it. Clean the cabinet with a soft, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- Keep the monitor away from magnetic objects, motors, TV sets, and transformer.
- Do not place heavy objects on the monitor or power cord.

1.2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltages, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

1.3 SERVICE NOTES

- When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
- When replacing a high wattage resistor (more than 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.
- Keep wires away from high voltage, high temperature components and sharp edges.
- Keep wires in their original position so as to reduce interference.
- For usage of this product please also refer to the user's manual.

2. Specification

2.1. PRODUCT SPECIFICATION

LCD Panel	15.0" TFT
Power Management	Energy Star compliant VESA DPMS compatible < 1W
Displayable Resolution	XGA 1024× 768 (max.)
Pixel Dimension	0.297× 0.297mm
LCD Display Color	16.2M Color Max. (8bit)
Viewing Angle	CR 10 Horizontal: -60° ~ +60° Vertical: -55° ~ +45°
Tilt	+20° ~ 0°
Contrast Ratio	300: 1 (min.) 400 : 1 (typ.)
Brightness	200 cd/m ² (min.) 250 cd/m ² (typ.)
Response Time	Tr: 9 ms Tf: 16ms (typ.)
Active Display Area	304.1mm× 228.1mm
Temperature	Operating: 0° C ~ +35° C Storage: -20° C ~ +60° C
Power	Input Voltage: 100~240 Vac Consumption: 30 Watts (Max.)

2.2. SUPPORTING TIMING CHART

ITEM	1	2	3	4	5
TIMING	640×350@70Hz	640×480@60Hz	640×480@67Hz	640×480@75Hz	640×480@72Hz
Pixel Rate	25.175MHz	25.175MHz	30.240MHz	31.500MHz	31.500MHz
H TOTAL	31.778us	31.778us	28.571us	26.667us	26.413us
H DISPLAY	25.422us	25.422us	21.164us	20.317us	20.317us
H B-Porch	1.907us	1.907us	3.175us	3.810us	4.063us
H Width	3.813us	3.813us	2.116us	2.032us	0.270us
H Border	0.318us	0.318us	0.000us	0.000us	0.000us
V TOTAL	14.268ms	16.683ms	15.000ms	13.334ms	13.734ms
V DISPLAY	11.122ms	15.253ms	13.714ms	12.800ms	12.678ms
V B-Porch	1.907ms	1.049ms	1.114ms	0.427ms	0.528ms
Vs Width	0.064ms	0.064ms	0.086ms	0.080ms	0.079ms
V Border	0.191ms	0.254ms	0.000ms	0.000ms	0.000ms
H/V Sync	+/-	-/-	-/-	-/-	-/-
Interlace	No.	No.	No.	No.	No.

ITEM	6	7	8	9	10
TIMING	640×480@85Hz	720×400@70Hz	800×600@56Hz	800×600@60Hz	800×600@72Hz
Pixel Rate	36.000MHz	28.322MHz	36.000MHz	40.000MHz	50.000MHz
H TOTAL	22.111us	31.778us	28.444us	26.400us	20.800us
H DISPLAY	17.778us	25.422us	22.222us	20.000us	16.000us
H B-Porch	2.222us	1.907us	3.556us	2.200us	1.280us
H Width	1.556us	3.813us	2.000us	3.200us	2.400us
H Border	0.000us	0.318us	0.000us	0.000us	0.000us
V TOTAL	11.764ms	14.268ms	17.778ms	16.579ms	13.853ms
V DISPLAY	11.093ms	12.711ms	17.066ms	15.840ms	12.480ms
V B-Porch	0.578ms	1.112ms	0.626ms	0.607ms	0.478ms
Vs Width	0.069ms	0.064ms	0.057ms	0.106ms	0.125ms
V Border	0.000ms	0.222ms	0.000ms	0.000ms	0.000ms
H/V Sync	-/-	-/+	+/+	+/+	+/+
Interlace	No.	No.	No.	No.	No.

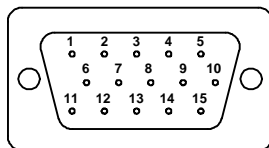
ITEM	11	12	13	14	15
TIMING	800×600@75Hz	800×600@85Hz	832×624@74.5Hz	1024×768@60Hz	1024×768@70Hz
Pixel Rate	48.500MHz	56.250MHz	57.280MHz	65.000MHz	75.000MHz
H TOTAL	21.333us	18.631us	20.112us	20.677us	17.707us
H DISPLAY	16.162us	14.222us	14.525us	15.754us	13.653us
H B-Porch	3.232us	2.702us	3.771us	2.462us	1.920us
H Width	1.616us	1.138us	1.118us	2.092us	1.813us
H Border	0.000us	0.000us	0.000us	0.000us	0.000us
V TOTAL	13.333ms	11.756ms	13.417ms	16.666ms	14.272ms
V DISPLAY	12.800ms	11.179ms	12.552ms	15.880ms	13.599ms
V B-Porch	0.448ms	0.503ms	0.784ms	0.600ms	0.513ms
Vs Width	0.064ms	0.056ms	0.060ms	0.124ms	0.106ms
V Border	0.000ms	0.000ms	0.00ms	0.000ms	0.000ms
H/V Sync	+/+	+/+	-/-	-/-	-/-
Interlace	No.	No.	No.	No.	No.

ITEM	16	17			
TIMING	1024×768@72Hz	1024×768@75Hz			
Pixel Rate	77.066MHz	78.750MHz			
H TOTAL	17.232us	16.660us			
H DISPLAY	13.287us	13.003us			

H B-Porch	1.869us	2.235us			
H Width	1.765us	1.219us			
H Border	0.000us	0.000us			
V TOTAL	13.889ms	13.328ms			
V DISPLAY	13.234ms	12.795ms			
V B-Porch	0.500ms	0.466ms			
Vs Width	0.103ms	0.050ms			
V Border	0.000ms	0.000ms			
H/V Sync	-/-	+/+			
Interlace	No.	No.			

2.3. D-SUB CONNECTOR

D-SUB 15 PIN CONNECTOR

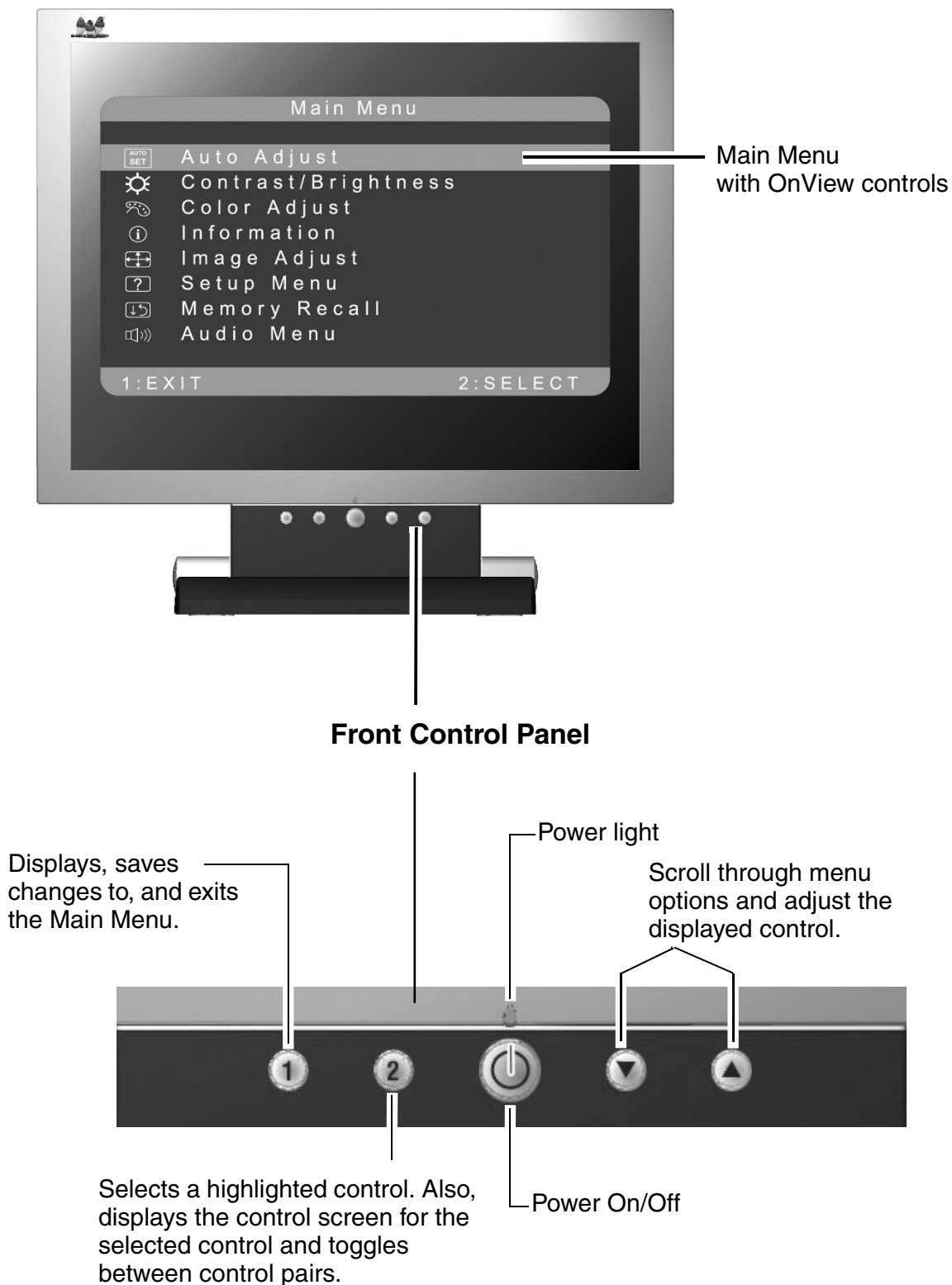


1.Red Video	6.Red GND	11.NC
2.Green Video	7.Green GND	12.SDA
3.Blue Video	8.Blue GND	13.H-sync
4.NC	9. +5V for DDC	14.V-sync
5.GND	10.GND	15.SCL

SIGNAL LEVEL

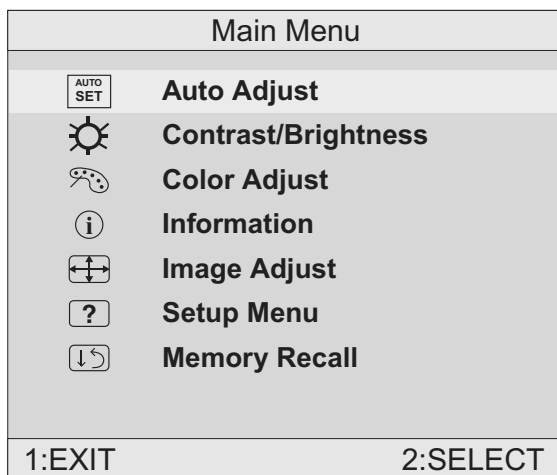
CONNECTOR	SIGNAL	DESCRIPTION
R	RED	0.7vp-p(VIDEO)
G	GREEN	0.7vp-p(VIDEO)
B	BLUE	0.7vp-p(VIDEO)
H	H/SYNC	TTL positive or negative
V	V/SYNC	TTL positive or negative
SDA	DDC1/2B	TTL
SCL	DDC1/2B	TTL

3. Front Panel Function Control Description



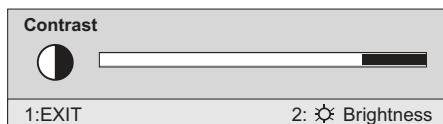
Do the following to adjust the screen image:

- To display the Main Menu, press button [1].



NOTE: All OnView menus and adjustment screens disappear automatically after about 15 seconds. This time period is adjustable through the Setup menu and the OSD timeout control described on page 11.

- To highlight a control you want to adjust, press ▲ or ▼ to scroll up or down the Main Menu.
- To select the highlighted control, press button [2]. A control screen appears like the example shown below.



The line at the bottom of the screen tells you what you can do next: Exit or Select the control that is highlighted.

- To adjust the control, press the up ▲ or down ▼ buttons.
- To save the adjustments and exit the menu, press button [1] *twice*.

The following tips may help you optimize your display:

- Adjust your computer's graphic card so that it outputs a video signal 1024 x 768 @ 60 Hz to the LCD display. (Look for instructions on “changing the refresh rate” in your graphic card's user guide.)
- If necessary, make small adjustments using H. POSITION and V. POSITION until the screen image is completely visible. (The black border around the edge of the screen should barely touch the illuminated “active area” of the LCD display.)

Main Menu Controls

Adjust the menu items shown below by using the up ▲ and down ▼ buttons.

Contro Explanation



Auto Adjust automatically sizes, centers, and fine tunes the video signal to eliminate waviness and distortion. Press the [2] button to obtain a sharper image.

NOTE: Auto Adjust works with most common video cards. If this function does not work on your LCD display, then lower the video refresh rate to 60 Hz and set the resolution to its pre-set value.



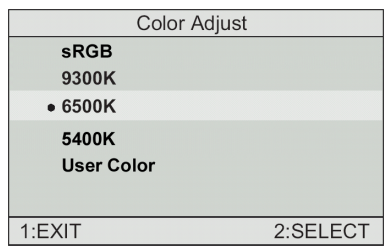
Contrast adjusts the difference between the image background (black level) and the foreground (white level).



Brightness adjusts background black level of the screen image.



Color Adjust provides several color options: preset color temperatures and User which allows you to adjust red (R), green (G), and blue (B). The factory setting for this product is 6500K (6500 Kelvin).



sRGB — sRGB is quickly becoming the industry standard for color management, with support being included in many of the latest applications. Enabling this setting allows the LCD display to more accurately display colors the way they were originally intended. Enabling the sRGB setting will cause the Contrast and Brightness adjustments to be disabled.

9300K — Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

6500K — Adds red to the screen image for warmer white and richer red.

5400K — Adds green to the screen image for a darker color.

User Color — Individual adjustments for red (R), green (G), and blue (B).

1 To select color (R, G or B) press button [2].

2 To adjust selected color, press ▲ or ▼.

Important: If you select RECALL from the Main Menu when the product is set to a Preset Timing Mode, colors return to the 6500K factory preset.



Information displays the timing mode (video signal input) coming from the graphics card in your computer. See your graphic card’s user guide for instructions on changing the resolution and refresh rate (vertical frequency).

VESA 1024 x 768 @ 60 Hz (recommended) means that the resolution is 1024 x 768 and the refresh rate is 60 Hertz.

Information	
H. Frequency:	48.60 KHz
V. Frequency:	60.00 Hz
Pixel Clock:	65.00 MHz
Resolution:	1024 x 768
Model Number:	VLCD523585-2W
Serial No:	
www.viewsonic.com	
1:EXIT	



Image Adjust

Image Adjust	
	H./V. Position
	H. Size
	Fine Tune
	Sharpness
1:EXIT	2:SELECT

The Image Adjust controls are explained below:



H./V. Position adjusts horizontal and vertical position of the screen image. You can toggle between Horizontal and Vertical by pressing button [2]. Horizontal moves the screen image to the left or to the right. Vertical moves the screen image up and down.



H. Size (Horizontal Size) adjusts the width of the screen image.

NOTE: Vertical size is automatic with your LCD display.



Fine Tune sharpens focus by aligning the illuminated text and/or graphic characters.

NOTE: Try the **Auto Adjust** before using the **Fine Tune** control.



Sharpness adjusts the clarity and focus of the screen image.



Setup Menu displays the menu shown below.

Setup Menu	
	Language Select
	Resolution Notifier
	OSD Position
	OSD Timeout
1:EXIT	2:SELECT

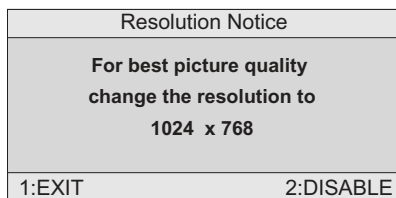
The Setup Menu controls are explained below.



Language Select allows you to choose the language used in the menus and control screens.



Resolution Notice advises the optimal resolution to use.



OSD Position allows you to move the on-screen display menus and control screens.



OSD Timeout sets the length of time an on-screen display screen is displayed. For example, with a “15 second” setting, if a control is not pushed within 15 seconds, the display screen disappears.



Memory Recall returns adjustments to the original factory settings if the display is operating in a factory Preset Timing Mode listed in this user guide.

Short Cut Key

Function Key : 5 Keys → 1 2  ▼ ▲

[1]	Main Menu
[2]	Auto Image Adjust
[▼] or [▲]	to immediately activate Contrast menu. It should be change to Brightness OSD by push button [2].
[▼] + [▲]	recall Contrast or Brightness while in the Contrast or Brightness adjustment, or recall both of Contrast and Brightness when the OSD is not open.
[1] + [2]	toggle 720x400 and 640x400 mode when input 720x400 or 640x400 mode.
[1] + [▼] + [▲] (Keep pushing 5 sec)	White Balance.
[1] + [▼]	Power Lock
[1] + [▲]	OSD Lock

4. Circuit Description

(VA521/VE510s-2/VE510b-2 Realtek Scaler)

A. AC-DC CONVERTER

The power supply with a high-integrated green-mode PWM controller provides several features to enhance the performance of power flyback converters.

I801 is a PWM controller and provides many protection functions.

I802 is a photo couple to transfer the feedback signal from the second side which I803 detected both of the output DC voltage on 3.3V and 12V.

D813 detected the working voltage on I801 and Q805 would pull down the voltage on I801 pin5 to shut down I801 if feedback loop was failed.

R826 would be a dynamic load which was active while backlight was turned off and system still working on, this kept 12V output voltage under 13V to protect the panel. After system went to power saving mode, the R826 would no loaded. This was detected by I804 and Q803 active the R826 to load or not.

B. Scaling controller

The RTD2013 ADC is to convert RGB analog signal to digital signal that scaling chip can acknowledge.

The HSYNC input receives a logic signal and provides the frequency reference for pixel clock generation.

The scaling IC is to convert the input signal ranging from VGA to XGA into XGA resolution that panel can acknowledge.

General

- Embedded dual DDC support DDC1, DDC2B, DDC/CI
- Zoom scaling up and down
- Embedded Pattern Generator
- No external memory required.
- Require only one crystal to generate all timing
- Embedded reset control output
- Embedded crystal output to MICROP
- 3 channels 8 bits PWM output, and selectable PWM clock frequency.

PIN DESCRIPTION

(I/O Legend: A= Analog, I= Input, O=Output, P=Power, G=Ground)

ADC: 15 pins

Name	I/O	Pin No	Description	Note
ADC_GND	AG	27	ADC ground	
ADC_REFIO	AP	28	ADC band-gap voltage de-coupling	1.20V
ADC_VDD	AP	29	Analog power	(3.3V)
BLUE+	AI	30	Analog input from BLUE channel	
BLUE-	AI	31	Analog input ground from BLUE channel	
ADC_GND	AG	32	ADC ground	
SOG/ADC_TEST	AIO	33	SOG in/ADC test pin	
GREEN+	AI	34	Analog input from GREEN channel	
GREEN-	AI	35	Analog input ground from GREEN channel	
ADCB_VDD	AP	36	Analog power	(3.3V)
RED+	AI	37	Analog input from RED channel	
RED_	AI	38	Analog input ground from RED channel	
ADC_GND	AG	39	Analog ground	
ADC_GND	AG	40	Analog ground	
ADC_VDD	AP	41	Analog power	(3.3V)
AHS	AI	42	Analog HS input	(10), (4), (5)
AVS	AI	43	Analog VS input	(2), (4), (5)

PLL:8 pins

Name	I/O	Pin No	Description	Note
XO	AI	1	Reference clock output	
XI	AO	2	Reference clock input	
DPLL_GND	AG	3	Ground for digital PLL	
DPLL_VDD	AP	4	Power for digital PLL	(3.3V)
APLL_VDD	AP	5	Power for multi-phase PLL	(3.3V)
PLL_TEST1	AIO	6	Test Pin 1 / IRQ#	3.3V tolerance
PLL_TEST2	AIO	7	Test Pin 2/Power-on-latch for crystal out Frequency	
APLL_GND	AG	8	Ground for multi-phase PLL	

Control Interface: 7 pins

Name	I/O	Pin No	Description	Note
SDIO [0]	IO	54	Serial control I/F data in/Parallel port data [0]	(2), (3), / 2mA
SDIO [1] / TCON [4] / BBLU [0]	IO	53	Parallel port data [1] / TCON [4] / TTL BBLU [0]	(1), (2), (3), / 2mA
SDIO [2] / TCON [3] / BBLU [1]	IO	52	Parallel port data [1] / TCON [3] / TTL BBLU [1]	(1), (2), (3), / 2mA
SDIO [3] / PWM2 / TCON [2]	IO	51	Parallel port data [1] / TCON [4] / PWM2	(1), (2), (3), / 2mA
SCLK	I	50	Serial control I/F clock	(2), (3), (5)
SCSB	I	111	Serial control I/F chip select	(2), (3), (5)
RESET	O	56	RESET output for Micron	(2), (5), (6) / 2mA

Display & TCON/VIDEO-8 Port: 54 pins

■ :LVDS+RSDS+TTLO
 ■ :RSDS+TTLO
 ■ :RSDS+TTLIO
 ■ :TTLO
 ■ :TTLIO

Pin NO	6-bits Dual RSDS	6-bits Single RSDS	8/6 bits Dual/Single LVDS	8 bits Dual/Single TTL	6 bits Dual TTL	6 bits Single TTL	Note
	S [3] / TCON [2] / PWM2	S [3] / TCON [2] / PWM2	S [3] / TCON [2] / PWM2	S [3] / TCON [2] / PWM2	S [3] / TCON [2] / PWM2	S [3] / TCON [2] / PWM2	(1), (2), (3), / 2mA
52	S [2] / TCON [3]	S [2] / TCON [3]	S [2] / TCON [3]	S [2] / BBLU [1] / TCON [3]	S [2] / TCON [3]	S [2] / TCON [3]	(1), (2), (3), / 2mA
53	S [1] / TCON [4]	S [1] / TCON [4]	S [1] / TCON [4]	S [1] / BBLU [0] / TCON [4]	S [1] / TCON [4]	S [1] / TCON [4]	(1), (2), (3), / 2mA
55	PWM2 / COUT / TCON [13]	PWM2 / COUT / TCON [13]	PWM2 / COUT / TCON [13]	PWM2 / COUT / TCON [13]	PWM2 / COUT / TCON [13]	PWM2 / COUT / TCON [13]	(1), (2), (3), / 2mA
59	BB3P	BB3P	NC	BBLU [7]	BBLU [7]	BBLU [7]	
60	BB3N	BB3N	NC	BBLU [6]	BBLU [6]	BBLU [6]	
61	BB2P	BB2P	NC	BBLU [5]	BBLU [5]	BBLU [5]	
62	BB2N	BB2N	NC	BBLU [4]	BBLU [4]	BBLU [4]	
63	BB1P	BB1P	NC	BBLU [3] / T0	BBLU [3]	BBLU [3]	
64	BB1N	BB1N	NC	BBLU [2] / T1	BBLU [2]	BBLU [2]	
65	BCLKP	BCLKP	NC	BGRN [1] / T2	TCON [6]	TCON [6]	
66	BCLKN	BCLKN	NC	BGRN [0] / T3	TCON [5]	TCON [5]	
67	BG3P	BG3P	NC	BGRN [7]	BGRN [7]	BGRN [7]	
68	BG3N	BG3N	NC	BGRN [6]	BGRN [6]	BGRN [6]	

73	BG2P	BG2P	TODP	BGRN [5] / T4	BGRN [5]	BGRN [5]	
74	BG2N	BG2N	TODN	BGRN [4] / T5	BGRN [4]	BGRN [4]	
75	BG1P	BG1P	TOCLKP	BGRN [3] / T6	BGRN [3]	BGRN [3]	
76	BG1N	BG1N	TOCLKN	BGRN [2] / T7	BGRN [2]	BGRN [2]	
77	BR3P	BR3P	TOCP	BRED [7] / T8	BRED [7]	BRED [7]	
78	BR3N	BR3N	TOCN	BRED [6] / T9	BRED [6]	BRED [6]	
79	BR2P	BR2P	TOBP	BRED [5] / T10	BRED [5]	BRED [5]	
80	BR2N	BR2N	TOBP	BRED [4] / T11	BRED [4]	BRED [4]	
81	BR1P	BR1P	TOAP	BRED [3] / T12	BRED [3]	BRED [3]	
82	BR1N	BR1N	TOAP	BRED [2] / T13	BRED [2]	BRED [2]	
85	AB3P	NC	TEDP	ABLU [7] / T14	ABLU [7]	ABLU [7]	
86	AB3N	NC	TEDN	ABLU [6] / T15	ABLU [6]	ABLU [6]	
87	AB2P	NC	TECLKP	ABLU [5] / T16	ABLU [5]	ABLU [5]	
88	AB2N	NC	TECLKN	ABLU [4] / T17	ABLU [4]	ABLU [4]	
89	AB1P	NC	TECP	ABLU [3] / T18	ABLU [3]	ABLU [3]	
90	BB1N	NC	TECN	ABLU [2] / T19	ABLU [2]	ABLU [2]	
91	ACLKP	NC	TEBP	ABLU [1] / T20	TCON [1]	TCON [1]	
92	ACLKN	NC	TEBN	ABLU [0] / T21	TCON [0]	TCON [0]	
93	AG3P	NC	TEAP	AGRN [7] / T22	AGRN [7]	AGRN [7]	
94	AG3N	NC	TEAN	AGRN [6] / T23	AGRN [6]	AGRN [6]	
99	AG2P	TCON [11]	NC	AGRN [5] / T24	AGRN [5]	AGRN [5]	
100	AG2N	TCON [10]	NC	AGRN [4] / T25	AGRN [4]	AGRN [4]	
101	AG1P	TCON [9]	NC	AGRN [3] / T26	AGRN [3]	AGRN [3]	
102	AG1N	TCON [8]	NC	AGRN [2] / T27	AGRN [2]	AGRN [2]	
103	AR3P	TCON [7]	NC	ARED [7] / T28	ARED [7]	ARED [7]	
104	AR3N	TCON [6]	NC	ARED [6] / T29	ARED [6]	ARED [6]	
105	AR2P	TCON [5]	NC	ARED [5] / TH	ARED [5]	ARED [5]	
106	AR2N	TCON [1]	NC	ARED [4] / TV	ARED [4]	ARED [4]	
107	AR1P	TCON [0]	NC	ARED [3] / TE	ARED [3]	ARED [3]	

108	AR1N	NC	NC	ARED [2] / TK	ARED [2]	ARED [2]	
113	PWM2 / COUT / TCON [12]	PWM2 / COUT / TCON [12]	PWM2 / COUT / TCON [12]	ARED [1]	COUT	PWM2 / COUT / TCON [12]	(9)
114	TCON [11] / V [0]	V [0]	V [0]	ARED [0]		TCON [11]	(1), (7), (8)
115	TCON [10] / V [1]	V [1]	V [1]	BRED [1]		TCON [10]	(1), (7), (8)
116	TCON [9] / V [2]	V [2]	V [2]	BRED [0]		TCON [9]	(1), (7), (8)
117	TCON [8] / V [3]	V [3]	V [3]	AGRN [1]		TCON [8]	(1), (7), (8)
118	TCON [7] / V [4]	V [4]	V [4]	AGRN [0]		TCON [7]	(1), (7), (8)
119	TCON [6] / V [5]	V [5]	V [5]	DHS	DHS	DHS	(1), (7), (8)
122	TCON [5] / V [6]	V [6]	V [6]	DVS	DVS	DVS	(1), (7), (8)
123	TCON [1] / V [7]	V [7]	V [7]	DENA	DENA	DENA	(1), (7), (8)
124	TCON [0] / VCLK	VCLK	VCLK	DCLK	DCLK	DCLK	(1), (7), (8)

*Single RSDS, even/odd swap, data (59~82) output to pin85~108, TCON (99~108) output to pin59~68.

*In 6-bit dual TTL output mode, Video8 cannot output TCON7~TCON11; while video8 can output TCON in 6-bit single TTL mode.

TMDS: 18 pins

Name	I/O	Pin No	Description	Note
TMDS_TST/ PWM1	AIO	9	TMDS_TEST Pin / PWM1 / Power-on-latch for serial / parallel port	
TMDS_GND	G	10		
TMDS_VDD	P	11		(3.3V)
NC	A	12	Impedance Match Reference.	
TMDS_VDD	P	13		(3.3V)
NC	I	14	Differential Data Input	
NC	I	15	Differential Data Input	
TMDS_GND	G	16		
NC	I	17	Differential Data Input	
NC	I	18	Differential Data Input	
TMDS_VDD	P	19		(3.3V)
NC	I	20	Differential Data Input	
NC	I	21	Differential Data Input	
TMDS_GND	G	22		
NC	I	23	Differential Data Input	
NC	I	24	Differential Data Input	
TMDS_GND	G	25		
TMDS_VDD	P	26		(3.3V)

PWM Interface: (PWM1, PWM2 can be selected from 1 of 3 possible pins.)

Name	I/O	Pin No	Description	Note
PWM2 / TCON [2] / S [3]	O	51	PWM2 / TCON [2] / SDIO [3]	(1), (2), (3), (5), (8),
PWM2 / TCON [13] / COUT	O	55	PWM2 / TCON [13] / Crystal out	(2), (8), (9)
PWM2 / TCON [12] / COUT	O	113	PWM2 / TCON [12] / Crystal out	(2), (8), (9) 6bit dual TTL cannot support

PWM1 / TMDS_TST	AIO	9	PWM1/ TMDS_TEST Pin/ Power-on-latch for serial / parallel port	(2), (7), (8)
PWM1 / DDCSDA / TCON [1] / BBLU [0]	IO	47	PWM1 / DDC serial control I/F data input / output / TCON [4]	(1), (2), (3), (5), (8),
PWM1 / TCON [7]	IO	125	PWM1 / TCON [7]	(1), (2), (3), (5), (8),
PWM0 / REFCLK	IO	112	PWM0 / (In / out) test pin for DCLK / Video8 even-odd signal	(2), (9)

DDC Channel:4 pins

Name	I/O	Pin No	Description	Note
DDCSCL/TCON [0] / BBLU [1]	I	46	DDC serial control I/F clock/TCON [0]/TTL BBLU [1]	(2), (3), (5)
DDCSDA/TCON [1] / PWM1/BBLU [0]	IO	47	DDC serial control I/F data input/ output/ TCON [1]/ PWM1/ TTL BBLU [0]	(1), (2), (3), (5), (6), (8)/8mA/no slew
TCON [5]	I	126	TCON [5]	(2), (3), (5)
TCON [7]/PWM1	IO	125	TCON [7]/ PWM1	(1), (2), (3), (5), (6), (8)/8mA/no slew

Power & Ground:22 pins

Name	I/O	Pin No	Description
3.3V Power	P	49,121	VCCIO: 2
3.3V Ground	G	48,120	GNDIO: 2
3.3V Power	P	58,71,83, 95,110	PVCC: 5
3.3V Ground	G	57,72,84,96,109	PGND: 5
2.5V Power	P	45,69,98,127	VCCK: 4
2.5V Ground	G	44,70,97,128	GNDK: 4

Note: (1) TTL compatible CMOS Input ($V_t=1.7V$); $V_{CC}=3.3V$;

(2) 5V tolerance pad;

(3) Internal 75K Ohms pull high resistor.

(4) Internal 75K Ohms pull low resistor.

(5) Schmitt trigger CMOS Input ($V_t=1.4\sim 2.2V$);

(6) Open-Drain, Output Drive low & Pull-high.

(7) Bi-directional input/output

(8) Programmable driving current (2~10mA)

(9) TTL output 5V & 3.3V

(10) 4V tolerance pad

C. MTV312M64

The MTV312M micro-controller is an 8051 CPU core embedded device especially tailored for CRT/LCD Monitor applications. It includes an 8051 CPU core, 1024-byte SRAM, 14 built-in PWM DACs, VESA DDC interface, 4-channel A/D converter, and a 64K-byte internal program Flash-ROM.

A “CMOS output pin” means it can sink and drive at least 4mA current. It is not recommended to use such pin as input function.

A “open drain pin” means it can sink at least 4mA current but only drive 10~20uA to VDD. It can be used as input or output function and needs an external pull up resistor.

A “8051 standard pin” is a pseudo open drain pin. It can sink at least 4mA current when output is at low level, and drives at least 4mA current for 160nS when output transits from low to high, then keeps driving at 100uA to maintain the pin at high level. It can be used as input or output function. It needs an external pull up resistor when driving heavy load device.

POWER CONFIGURATION

The MTV312M can work on 5V or 3.3V power supply system.

In 5V power system, the VDD pin is connected to 5V power and the VDD3 needs an external capacitor, all output pins can swing from 0~5V, input pins can accept 0~5V input range.

And ADC conversion range is 5V. However, X1 and X2 pins must be kept below 3.3V.

In 3.3V power system, the VDD and VDD3 are connected to 3.3V power, all output pins swing from 0~3.3V, HSYNC, VSYNC and open drain pin can accept 0~5V input range, other pins must be kept below 3.3V. And the ADC conversion range is 3.3V.

D. INVERTER

In order to drive the CCFLs embedded in the panel module, there is a **push-pull** inverter to convert by the controller.

from input 12V up to hundreds of AC voltage output peak to peak.

The inverter is formed by symmetric in order to drive the separate lamp modules.

The input stage consists of a PWM controller, **push-pull** inverter, and switching MOSFET to convert DC input into AC output.

The output stage consists of a **tuning capacitor, transformer, and push-pull MOSFET** pair to boost AC output up to hundreds of voltage peak to peak.

And one resistor is serial to lamp for output voltage feedback.

There are two signals which control the inverter come from system to turn on the inverter and control brightness.

Logic “low” level which send to I901 is turn on the inverter.

BRI signal control brightness by DC level which was integral from PWM signal.

5. Adjusting Procedure

5.1. ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.
3. ESD protection is needed before adjustment.

5.2. MAIN ADJUSTMENTS

NO.	FUNCTION	DESIGNATION
1.	V-com Voltage	On the back of the Panel
2.	Eeprom Initial	Function Key
3.	White Balance	Function Key

5.3. ALIGNMENT PROCEDURES

Adjustment Conditions and Precautions:

- (A). Power supply voltage:
AC 110/120V \pm 10% 60 Hz \pm 5%, AC 220/240V \pm 10% 50 Hz \pm 5%.
- (B). Warm up time:
The display must be power ON for at least 30 minutes at full white pattern before starting alignments.
This is especially critical in color temperature and white balance adjustments.
- (C). Signals: reference the front detail specifications and timing table.
Video : reference the front detail specifications.

1. Adjustment of V-com Voltage:

- A. Timing : 1024x768@60Hz. 48KHz
- B. Pattern : The picture of “ Shut down windows” or Full screen pixel ON/OFF pattern.
- C. Adjust V-com to let the center of the screen no flash.

2. Eeprom Initial:

- A. Timing : 1024x768@60Hz.
- B. Pattern : Cross hatch.
- C. Switch off the power and press the “▲” and “2” key simultaneously, then switch on the power. At this time we can enter into the factory mode when press the “1”key.
- D. Select the “EEPROM INIT” item and press “2”key to reset the Eeprom.

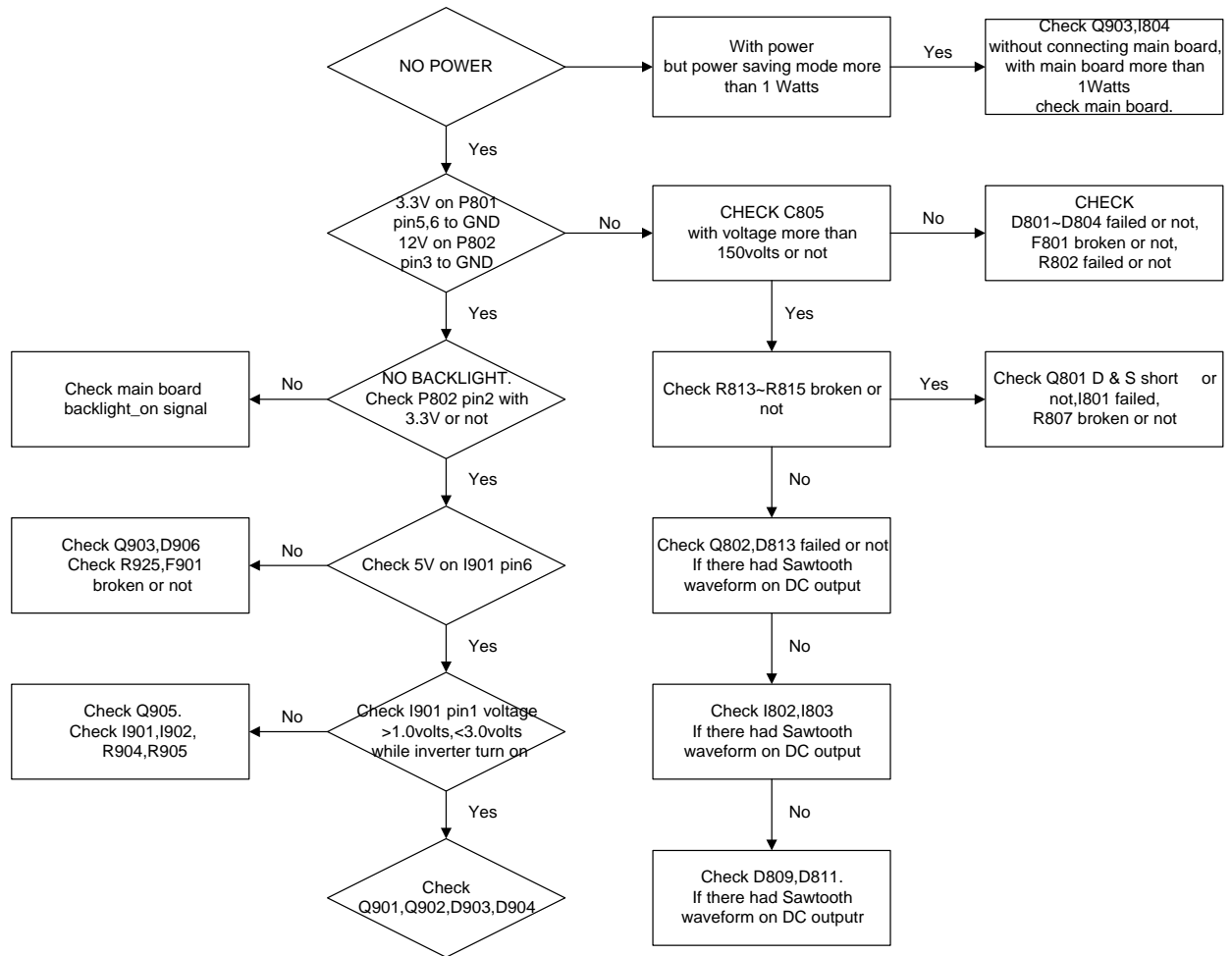
3. White Balance Adjustment :

- A. Timing : 1024x768@60Hz.
- B. Pattern : 16Gray Level. or 5-MOSAIC (Pattern 42)
- C. Set CA210 color analyzer at the center of screen and along a perpendicular to the screen at 0cm from the display.
- D. Move “▼” key to select the “ WHITE BALANCE” item in the factory mode and press “2”key, then the white balance will be auto dadjusted.
- E. Color temperature verification: (Set Brightness and Contrast to Maximum)
6500K verify : press “▼”, “▲” key to move cursor to 6500K at factory mode
and press “2” key, and then check the color temperature is
 $x=0.313 \pm 0.02$
 $y=0.329 \pm 0.02$
Y 200 cd/m²

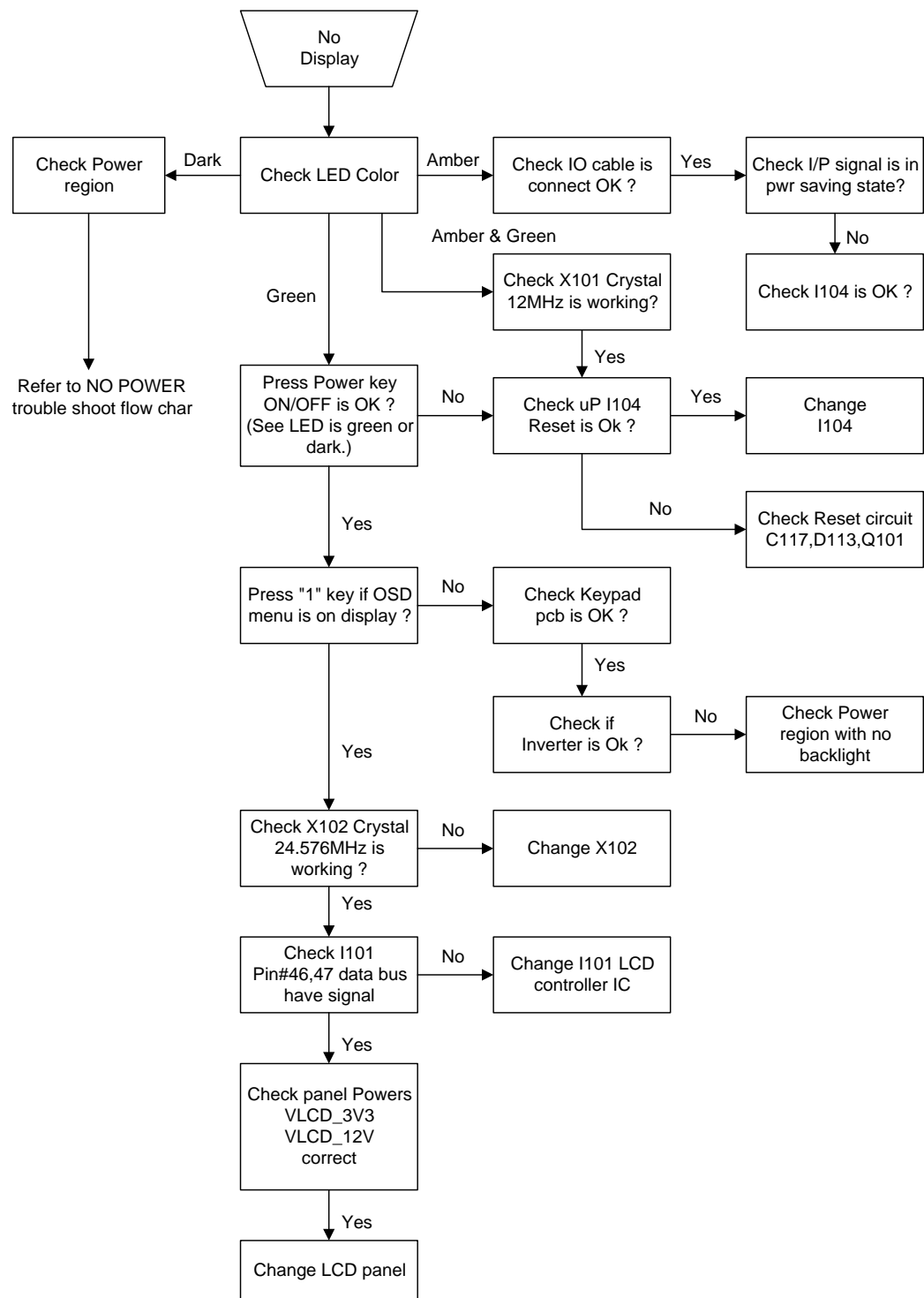
6. Trouble Shooting Flow Chart

(VA521/VE510s-2/VE510b-2)

6.1. NO POWER or BACKLIGHT



6.2. NO DISPLAY (Realtek Scaler)



7. Recommended Spare Parts List

RECOMMENDED SPARE PARTS LIST (VA521-1)

ViewSonic Model Number: VLCDS27996

Rev: 1b

Item	Description	ECR/ECN	ViewSonic P/N	Ref.P/N	Location	Q'ty
1	Accessories:					
	POWER CORD	USA WALL 1.83M BLACK	A-PC-0106-0121	2427130046	P951	1
2	PC Board Assembly:	PCB ASS'Y BLOCK (MAIN)	Removed 10/08/04	B-MB-0201-0833	6201-7956908101	1
3		PCB ASS'Y BLOCK (MAIN)	Added 10/08/04	B-00000277	6201-7956908161	1
4		PCB ASS'Y BLOCK (CON)		B-CB-0206-0177	6202-7956908101	1
5		PCB ASS'Y BLOCK (POWER)		B-PS-0204-0066	6204-7956908101	1
6	Cabinets:	FRONT BEZEL		C-FP-0301-0966	2024266702	1F01
7		CABI BACK		C-BC-0302-0583	2022262202	2C01
8	Cables:	I/O CABLE		A-VIO-0118-0034	2427501174	P961
9	Documentation:	DATE:2003	Removed 10/08/04	A-CD-VA521	2438501135	6P80
10		CD-OWNER GUIDE	Added 10/08/04	DC-00000278	2438501145	6P80
11		LABEL		M-LB-0813-0928	2055632038	6P02
12		LABEL		M-LB-0813-0927	2055636019	6P05
13		LABEL		M-LB-0813-0530	2055617101	6P13
14		LABEL		M-LB-0813-0959	2055613392	6P14
15		LABEL		M-LB-0830-0731	2055131817	6P50
16		LABEL		M-LB-0813-0528	2055103400	6P52
17		LABEL		M-LB-0813-0769	2055613293	5B10
18		SERIAL LABEL		M-LB-0813-0002	2056603050	6P55 6P54 6P51
19	Electronic	LCD PANEL		M-LCD-0826-0223	2212004701	V901
20	Hardware:	HINGE		M-MS-0808-9216	2106656300	2C20 RA (Interchangeable)
21		HINGE		M-MS-0808-9216	2106656301	2C20 RB (Interchangeable)
22	Miscellaneous:	LED INDIC.-PWR		M-MS-0808-9397	2053753701	1F02
23	Packing Material:	CARTON BOX		P-BX-0601-0946	2011121005	6P01
24		POLYFOAM		P-FM-0602-0855	2012176900	6P20
25		POLYFOAM		P-FM-0602-0856	2012177000	6P21
26		POLYETHY BAG		M-MS-0808-0027	2013150901	6P60
27	Plastics:	FUNCTION KEY		PL-FK-0709-0151	2044266102	1F03
28		NAME PLATE		M-MS-0808-9213	2051352000	1F04
		NAME PLATE		M-MS-0808-9214	2051352100	1F05
		NAME PLATE		M-MS-0808-9215	2051352200	2C02
		STAND		PL-PS-0715-0986	2028258002	5B01

RECOMMENDED SPARE PARTS LIST (VE510b-2)

ViewSonic Model Number: VLCDS27996

Rev: 1c

Item	Description			ECR/ECN	ViewSonic P/N	Ref. P/N	Location	Q'ty
1	Accessories:	POWER CORD	USA WALL 1.83M BLACK		A-PC-0106-0121	2427130046	P951	1
	PC Board Assembly:	PCB ASS'Y BLOCK (MAIN)		Removed 07/24/04	B-MB-0201-0853	6201-7956908251		1
		PCB ASS'Y BLOCK (MAIN)		Added 07/24/04	B-MB-0201-0853	6201-7956908252		1
2		PCB ASS'Y BLOCK (MAIN)		Removed 10/08/04	B-00000279	6201-7956908261		1
3		PCB ASS'Y BLOCK (CON)		Added 10/08/04	B-CB-0206-0177	6202-7956908101		1
4		PCB ASS'Y BLOCK (POWER)			B-PS-0204-0066	6204-7956908101		1
5	Cabinets:	FRONT BEZEL	ABS 94 HB MIDNIGHT GRAY		C-FP-0301-0991	2024266704	1F01	1
6		CABI BACK	ABS 94HBMIDNIGHT GRAY		C-BC-0302-0597	2022262203	2C01	1
7	Cables:	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK		A-VIO-0118-0034	2427501174	P961	1
	Documentation:	CD-OWNER GUIDE		Removed 10/08/04	A-CD-VE510	2438501147	6P81	1
8		CD-OWNER GUIDE	VE510B-2 WIZARD DATE:20040205	Added 10/08/04	A-CD-VE510B-2	2438501148	6P80	1
9		LABEL	VE510B-2 VLCDS27996-3W M		M-LB-0813-0981	2055632063	6P02	
10		LABEL	ViewSonic VA520 NUMBER STICKER		M-LB-0813-0855	2055613281	6P03	
11		LABEL	VE510B-2 VLCDS27996-3W SMALL		M-LB-0813-0982	2055636024	6P05	
12		LABEL	10*20 HI-POT TESTED 0K		M-LB-0813-0530	2055617101	6P13	
13		LABEL	VSC HIGH VOLTAGE WARNING LABEL		M-LB-0813-0959	2055613392	6P14	
14		LABEL	VE510B-2 VLCDS27996-3W 040728		M-LB-0830-0714	2055131836	6P50	1
15		LABEL	JK0936F WEN		M-LB-0813-0528	2055103400	6P52	1
16		LABEL	VIEWSONIC OPEN STAND LABEL-LCD		M-LB-0813-0769	2055613293	5B10	1
17		SERIAL LABEL	VIEWSONIC LCD SERIAL LABEL		M-LB-0813-0002	2056603050	6P55 6P54 6P51	1
18	Electronic	LCD PANEL	CLAA150XG08V CPT		M-LCD-0826-0223	2212004701	V901	1
	Hardware:	HINGE	VA521 -5° ± 20° (F.S)		M-MS-0808-9216	2106656300	2C20 RA	1
19		HINGE	VA521 -5°~+20° (T.L)		M-MS-0808-9216	2106656301	2C20 RB	1
20	Miscellaneous:	LED INDIC.-PWR	VA521 PMMA 94HB		M-MS-0808-9397	2053753701	1F02	1
21	Packing Material:	CARTON BOX	VE510B-2 VLCDS27996-3W 040728		P-BX-0601-0970	2011121007	6P01	1
22		POLYFOAM	VA521 EPS (L)		P-FM-0602-0855	2012176900	6P20	1
23		POLYFOAM	VA521 EPS (R)		P-FM-0602-0856	2012177000	6P21	1
24		POLYETHY BAG	700LX600WX0.03tmm PE-LD ADD>PE		M-MS-0808-0027	2013150901	6P60	1
25	Plastics:	FUNCTION KEY	VA521 ABS 94HB AL-PLATE		PL-FK-0709-0151	2044266102	1F03	1
26		NAME PLATE	VIEWSONIC LOGO 3 PIN VA521		M-MS-0808-9213	2051352000	1F04	1
27		NAME PLATE	VIEWSONIC E015-006 3-BIRD LOGO		M-MS-0808-9214	2051352100	1F05	1
28		NAME PLATE	NAME PLATE VIEWSONIC E015-027		M-MS-0808-9396	2051352202	2C02	1
29		STAND	ABS 94HB MIDNIGHT GRAY		PL-PS-0715-0992	2028258003	5B01	1

RECOMMENDED SPARE PARTS LIST (VE510s-2)

ViewSonic Model Number: VLCDS27996

Rev: 1c

Item		Description		ECR/ECN	ViewSonic P/N	Ref.P/N	Location	Q'ty
1	Accessories:	POWER CORD	USA WALL 1.83M BLACK		A-PC-0106-0121	2427130046	P951	1
	PC Board Assembly:	PCB ASS'Y BLOCK (MAIN)		Removed 04/01/04	B-MB-0201-0854	6201-7956908252		1
2		PCB ASS'Y BLOCK (MAIN)		Added 04/01/04 Removed 10/11/04	B-MB-0201-0854	6201-7956908251		1
		PCB ASS'Y BLOCK (MAIN)		Added 10/11/04	B-00000285	6201-7956908261		1
3		PCB ASS'Y BLOCK (CON)			B-CB-0206-0177	6202-7956908101		1
4		PCB ASS'Y BLOCK (POWER)			B-PS-0204-0066	6204-7956908101		1
5	Cabinets:	FRONT BEZEL	ABS 94 HBPS-7604B/C4001		C-FP-0301-0993	2024266703	1F01	1
6		CABI BACK	ABS 94HB PANTON BLACK C=4001		C-BC-0302-0583	2022262202	2C01	1
7	Cables:	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	Added 10/11/04	A-VIO-0118-0034	2427501174	P961	1
	Documentation:	CD-OWNER GUIDE VE510S-2						
8		WIZARD DATE:20040205	VE510S-2 WIZARD DATA:20040205		A-CD-VE510S-2	2438501147	6P80	1
9		LABEL	VE510S-2 VLCDS27996-2W (M)		M-LB-0813-0986	2055632062	6P02	1
10		LABEL	ViewSonic VA520 NUMBER STICKER		M-LB-0813-0855	2055613281	6P03	1
11		LABEL	VE510S-2 VLCDS27996-2W SMALL		M-LB-0813-0987	2055636023	6P05	1
12		LABEL	10*20 HI-POT TESTED OK		M-LB-0813-0530	2055617101	6P13	1
13		LABEL	VSC HIGH VOLTAGE WARNING LABEL		M-LB-0813-0959	2055613392	6P14	1
14		LABEL	VE510S-2 VLCDS27996-2W 040728	Added: ECO 4628	M-LB-0830-0713	2055131835	6P50	1
15		LABEL	JK0936F WEN		M-LB-0813-0528	2055103400	6P52	1
16		LABEL	VIEWSONIC OPEN STAND LABEL-LCD		M-LB-0813-0769	2055613293	5B10	1
17		SERIAL LABEL	VIEWSONIC LCD SERIAL LABEL		M-LB-0813-0002	2056603050	6P55 6P54 6P51	1
18	Electronic	LCD PANEL	CLAA150XG08V CPT		M-LCD-0826-0223	2212004701	V901	1
19	Hardware:	HINGE	VA521 -5° ± 20 (F.S)		M-MS-0808-9216	2106656300	2C20 RA	1
20		HINGE	VA521 -5°~+20°(T.L)		M-MS-0808-9216	2106656301	2C20 RB	1
21	Miscellaneous:	LED INDIC.-PWR	VA521 PMMA 94HB	Added 10/11/04	M-MS-0808-9397	2053753701	1F02	1
	Packing Material:	CARTON BOX		Removed 10/11/04	P-BX-0601-0972	2011121003		1
22		CARTON BOX	VE510S-2 VLCDS27996-2W 040728	Added 10/11/04	P-00000286	2011121006	6P01	1
23		POLYFOAM	VA521 EPS (L)		P-FM-0602-0855	2012176900	6P20	1
24		POLYFOAM	VA521 EPS (R)		P-FM-0602-0856	2012177000	6P21	1
25		POLYETHY BAG	700LX600WX0.03tmm PE-LD ADD>PE		M-MS-0808-0027	2013150901	6P60	1
26	Plastics:	FUNCTION KEY	VA521 ABS 94HB AL-PLATE		PL-FK-0709-0151	2044266102	1F03	1
27		NAME PLATE	VIEWSONIC LOGO 3 PIN VA521		M-MS-0808-9213	2051352000	1F04	1
28		NAME PLATE	VIEWSONIC E015-006 3-BIRD LOGO		M-MS-0808-9214	2051352100	1F05	1
		NAME PLATE	NAME PLATE VIEWSONIC E015-017	Removed 10/11/04	M-MS-0808-9215	2051352200	2C02	1
29		NAME PLATE	NAME PLATE VIEWSONIC E015-027	Added 10/11/04	M-MS-0808-9396	2051352202	2C02	1
30		STAND	ABS94HBPANTONE BLACK C=4001		PL-PS-0715-0986	2028258002	5B01	1

BOM LIST (VA521-1)

ViewSonic Model Number: VLCD527996

Rev: 1c

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
1	M-LB-0813-0856	2055613379	LABEL	ViewSonic CONTAINER LABEL	6P11
2	E-C-0404-3815	2346410496	CAP,CHIP 85°C	CS 0603/Y5V/50V 0.1u Z T	C116 C122 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C148 C149 C151 C154 C157 C158 C160 C161 C162 C163 C166 C167 C168 C169 C170 C172 C175 C178 C179 C180
3	E-R-0405-6409	2253210196	RES,CHIP 1/10W	RC 0603 1/10W 100 ohm J T	R103 R106 R108 R10 R112 R114 R116 R120 R132 R134 R135 R144 R145 R150 R151 R152 R153 R154 R155 R156 R176 R177 R186
4	E-D-0403-1667	2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 TEMIC GS08	D101 RA D103 RA D104 RA D106 RA D107 RA D108 RA D113 RA D114 RA D116 RA D117 RA D119 RA D120 RA D121 RA D122 RA
5	E-D-0403-2041	2364600396	DIODE,SWITCH SMD	LL4148 DIODES MINIMELF	D101 RB D103 RB D104 RB D106 RB D107 RB D108 RB D113 RB D114 RB D116 RB D117 RB D119 RB D120 RB D121 RB D122 RB
6	M-WR-0828-0450	2428106075	JUMPER	0.6 7.50MM	J801 J802 J803 J808 J809 J810 J811 J901 J902 J903 J909 J910 J911 J912
7	E-R-0405-6600	2253200096	RES,CHIP 1/10W	RC 0603 1/10W 0 ohm J T	L101 L102 L103 R102 R105 R107 R111 R125 R197
8	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	1F18 1F19
9	E-R-0405-6419	2253247296	RES,CHIP 1/10W	RC 0603 1/10W 4.7Kohm J T	R128 R129 R149 R157 R159 R163 R181
10	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	9S01 2C22
11	#N/A	2346147396	CAP,CHIP 125°C	CS 0603/X7R/50V 0.047u K T	C102 RA C103 RA C104 RA C106 RA C107 RA C109 RA
12	#N/A	2346247396	CAP,CHIP 125°C	CS 0603/X7R/25V 0.047u K T	C102 RB C103 RB C104 RB C106 RB C107 RB C109 RB
13	E-R-0405-6410	2253210296	RES,CHIP 1/10W	RC 0603 1/10W 1Kohm J T	R124 R130 R133 R161 R188 R192
14	#N/A	2336322613	CAP,MINI ELE 105°C	EC 22u/ 16V 4*7 P=2.5 T	C132 C144 C147 C159 C171 C181
15	M-WR-0828-0478	2428106100	JUMPER	0.6 10.00MM	J807 J904 J906 J907 J908 L802
16	E-L-0407-1535	2379820196	BEAD,HI-IMPEDANCE	Z= 200ohm(100MHZ~) 0805 200mA	L106 L107 L108 L109 L110
17	#N/A	2360100696	XISTOR,PNP R SMD	PMBS3906 SOT-23 PHILIPS	Q101 RA Q102 RA Q103 RA Q107 RA Q108 RA
18	E-Q-0402-1607	2360100796	XISTOR,PNP R SMD	MMBT3906 SOT-23 DIODES	Q101 RB Q102 RB Q103 RB Q107 RB Q108 RB
19	#N/A	2336347613	CAP,MINI ELE 105°C	EC 47u/ 16V 5*7 P=2.5 T	C155 C164 C165 C176 C177

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
20	#N/A	2403702513	SWITCH,TACT	TSTA-2 4.3mm 160g HUA JIE	S701 S702 S703 S704 S705
21	E-D-0403-0531	2363600195	DIODE,SWITCH	1N4148 DO-35 T	D808 D902 D903 D904 D905
22	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER O20*2TMM SQUARE GRAIN	5B03
23	E-C-0404-4224	2341147096	CAP,CHIP 125°C	CS 0603/COG/50V 47p J T	C111 C113 C114 C115
24	E-C-0404-4423	2341122096	CAP,CHIP 125°C	CS 0603/COG/50V 22p J T	C119 C121 C145 C146
25	#N/A	2259210308	RES,CHIP NETWORKS	8P4R 1/16W 10Kohm J P=0.8	RN1 RN2 RN3 RN4
26	E-R-0405-6604	2253222296	RES,CHIP 1/10W	RC 0603 1/10W 2.2Kohm J T	R118 R119 R139 R140
27	E-R-0405-6411	2253210396	RES,CHIP 1/10W	RC 0603 1/10W 10Kohm J T	R146 R180 R190 R199
28	#N/A	2253410096	RES,CHIP 1/4	RC 1206 1/4 W 10ohm J T	R807 R810 R818 R831
29	#N/A	2251439086	RES,CHIP 1/4	RC 1206 1/4 W 3.9 ohm F T	R813 R814 R815 R816
30	E-R-0405-5989	2253310096	RES,CHIP 1/8	RC 0805 1/8 W 10ohm J T	R904 R905 R910 R911
31	E-D-0403-1105	2363217595	DIODE,RECT	20D8 IR	D801 RA D802 RA D803 RA D804 RA
32	E-D-0403-1531	2363221195	DIODE,RECT	PG208 PEC	D801 RB D802 RB D803 RB D804 RB
33	#N/A	2105251400	SPRING PLATE	SPTE T=0.4MM (GROUND PLATE)	9H10
34	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	1F14
35	M-MS-0808-9408	2061453400	BUSHING	VE710 PLUG RUBBER	2C04
36	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	5B06
37	E-C-0404-3898	2341110096	CAP,CHIP 125°C	CS 0603/COG/50V 10p J T	C101 C105 C108
38	E-D-0403-1779	2364503996	DIODE,ZENER SMD	BZV55-C5V6 PHILIPS	D105 RA D111 RA D112 RA
39	E-D-0403-2808	2364505616	DIODE,ZENER SMD	TZMC5V6 SOD-80 5.2V~6V VISHAY	D105 RB D111 RB D112 RB
40	#N/A	2379520196	BEAT,HI-CURRENT	Z= 200ohm 0805 I=2.0A	L111 L112 L113
41	E-R-0405-5988	2253300096	RES,CHIP 1/8	RC 0805 1/8 W 0ohm J T	L115 R165 R189
42	#N/A	2251275096	RES,CHIP 1/10	RC 0603 1/10W 75 ohm F T	R104 R109 R113
43	E-R-0405-6603	2253222096	RES,CHIP 1/10W	RC 0603 1/10W 22 ohm J T	R171 R172 R195
44	#N/A	2347110496	CAP,CHIP 125°C	CS 0805/X7R/50V 0.1u K T	C813 C909 C916
45	M-MS-0808-0854	2097400301	EYELET	BSS3-1/2H T=0.25 SN 3 μm	E801 E802 E803
46	E-Q-0402-0718	2361316191	XISTOR,NPN R	2PC945P PHILIPS	Q802 RA Q903 RA Q905 RA
47	E-Q-0402-0428	2361302591	XISTOR,NPN R	2SC945(P) TO-92 NEC	Q802 RB Q903 RB Q905 RB
48	M-WR-0828-0455	2428106050	JUMPER	0.6 5.00MM	J806 J812 L804
49	#N/A	2335310841	CAP,ELE LOW ESR 105°C	EC 1000u/ 16V 10*16 P=5.0 C	C816 C817 C819
50	M-LB-0813-0002	2056603050	SERIAL LABEL	VIEWSONIC LCD SERIAL LABEL	6P55 6P54 6P51
51	#N/A	2379312196	BEAD,HI-IMPEDANCE	Z= 120ohm(100MHZ~) 0603 200mA	L104 L105
52	E-Q-0402-1624	2360301696	XISTOR,NPN R SMD	PMBS3904 SOT-23 PHILIPS	Q106 RA Q109 RA
53	E-Q-0402-1180	2360301296	XISTOR,NPN R SMD	MMBT3904 SOT-23 DIODES	Q106 RB Q109 RB
54	E-R-0405-6601	2253210596	RES,CHIP 1/10W	RC 0603 1/10W 1Mohm J T	R127 R158
55	E-R-0405-6001	2253347296	RES,CHIP 1/8	RC 0805 1/8 W 4.7Kohm J T	R183 R196
56	E-Q-0402-0839	2361111191	XISTOR,PNP R	2SA1020(Y) TO-92 TOSHIBA	Q105 Q803
57	#N/A	2344133296	CAP,CHIP 125°C	CS 1206/COG/50V 3300P J T	C903 C904
58	#N/A	2251400096	RES,CHIP 1/4	RC 1/4W 0.00 F	F901 R925
59	#N/A	2360608496	FET,N-CH(SMD)	2N7002K SOT-23 VISHAY	Q901 Q902
60	#N/A	2253456496	RES,CHIP 1/4	RC 1206 1/4 W 560Kohm J T	R803 R830
61	E-R-0405-5991	2253310396	RES,CHIP 1/8	RC 0805 1/8 W 10Kohm J T	R812 R916
62	#N/A	2253422096	RES,CHIP 1/4	RC 1206 1/4 W 22 ohm J T	R817 R832
63	#N/A	2253310596	RES,CHIP 1/8	RC 0805 1/8 W 1Mohm J T	R909 R920
64	#N/A	2333547691	CAP,ELE 105°C	EC 47u/ 35V 6.3*11 P=5.0 T	C810 C919
65	#N/A	2284110291	CAP,CER	CC 1000P/1KV X7R P=5.0 K T	C814 C815
66	E-C-0404-3890	2333347701	CAP,ELE 105°C	EC 470u/ 16V 10*12.5 P=5.0 C	C901 C820
67	#N/A	2407200991	HOLDER,FUSE	CQ-05T (5mm DIA FUSE)	S802 S803
68	#N/A	2365328191	IC,LINEAR	AP431VA TO-92 ATC	I803 RA I804 RA
69	E-IC-0401-2152	2365321991	IC,LINEAR	KA431AZTA TO-92 FAIRCHILD	I803 RB I804 RB
70	E-R-0405-7169	2232491495	RES,CBN 1/4	RD 1/4W 910Kohm P=7.5 J T	R804 R805
71	E-R-0405-3443	2233447995	RES,CBN 1/4 S	RD 1/4WS 4.70 J T52 MINI	R901 R902
72	E-C-0404-4834	2300922401	CAP MTL MINI	X2 0.22u/275V P=15.0 M C	C801 C804
73	#N/A	2287133212	CAP,CER	Y1 CAP 3300P/250V K T	C802 C803
74	#N/A	2275420001	CAP CER	TC 20P/3KV SL P=7.5 J C	C914 C915
75	E-D-0403-1501	2363231612	DIODE,RECT	31DF2 IR(NI)	D809 D811
76	#N/A	2404380202	CONNECTOR	WBT CONN. P=8.0mm 2P	P901 P902
77	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1F17 1F23
78	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	5B04
79	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	5B05
80	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94HB AL-PALTE	5B07
81	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2C23
82	E-R-0405-6605	2253227296	RES,CHIP 1/10W	RC 0603 1/10W 2.7Kohm J T	R191
83	E-IC-0401-4046	2365930996	IC,DIGITAL SMD	RTD2013 PQFP128 Realtek	I101

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
84	E-IC-0450-0041	2365929996	IC,DIGITAL SMD	MTV312M64-AJ PLCC44 MYSON	I104
85	E-IC-0401-2269	2365915896	IC,DIGITAL SMD	24LC16B/SN MICROCHIP SO08	I105 RA
86	#N/A	2365100996	IC,MEMORY	AT24C16AN-10SI-2.7 SOIC8 ATMEL	I105 RB
87	#N/A	2365812696	IC,LINEAR(SMD)	CM2860K1M223 SOT-223 CHAMPION	I106 RA
88	#N/A	2365813196	IC,LINEAR(SMD)	AME8805DEGT SOT-223 AME	I106 RB
89	#N/A	2407630250	SOCKET,SMD	6240-50-OR5P 0.5*50P KYOCERA	P107 RA
90	#N/A	2407630350	SOCKET,SMD	2206BL11250RLP 0.5*50P FRANCON	P107 RB
91	#N/A	2360501396	FET,P-CH SMD	AP2305N SOT-23 APEC	Q104 RA
92	#N/A	2360501296	FET,P-CH SMD	AO3411 SOT-23 ALPHA	Q104 RB
93	#N/A	2259222008	RES,CHIP NETWORKS	8P4R 1/16W 22 ohm J P=0.8	RN6
94	#N/A	2251290916	RES,CHIP 1/10	RC 0603 1/10W 9.09Kohm F T	R142
95	#N/A	2251233216	RES,CHIP 1/10	RC 0603 1/10W 3.32Kohm F T	R148
96	E-R-0405-7000	2253222196	RES,CHIP 1/10W	RC 0603 1/10W 220 ohm J T	R182
97	#N/A	2202518300	PCB MULTILAYER	VA521(A) M/B FR4*2 100*82	U101
98	#N/A	2336310613	CAP,MINI ELE 105°C	EC 10u/ 16V 4*7 P=2.5 T	C117
99	#N/A	2336310713	CAP,MINI ELE 105°C	EC 100u/ 16V 6.3*7 P=2.5 T	C156
100	#N/A	2404301112	CONNECTOR	JST PH 13P SIDE P=2.0 OR EQUAL	P101
101	M-MS-0808-6355	2404301107	CONNECTOR	JST PH 8P SIDE P=2.0 OR EQUAL	P104
102	#N/A	2404371008	CONNECTOR	JST PH 9P TOP P=2.0 OR EQUAL	P105
103	E-X-0415-0119	2369103601	XTAL,OSC	12.000MHZ/49US	X101
104	E-X-0415-0112	2369103901	XTAL,OSC	24.576MHZ/49US	X102
105	M-MS-0808-6352	2363703800	LED	LED 3 GRN/YEL	D701
106	#N/A	2202127100	PC BOARD	VA521 KEY/B FR1 115*31	U701
107	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	P701
108	E-C-0404-5329	2349110396	CAP,CHIP 125°C	CS 1206/X7R/50V 0.01u K T	C809
109	E-C-0404-4212	2347410596	CAP,CHIP 85°C	CS 0805/Y5V/50V 1.0u Z T	C902
110	#N/A	2347427396	CAP,CHIP 85°C	CS 0805/Y5V/50V 0.027u Z T	C905
111	#N/A	2342133196	CAP,CHIP 125°C	CS 0805/COG/50V 330p J T	C906
112	#N/A	2342127096	CAP,CHIP 125°C	CS 0805/COG/50V 27p J T	C907
113	#N/A	2347647596	CAP,CHIP 85°C	CS 0805/Y5V/16V 4.7u Z T	C908
114	#N/A	2347110396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.01u K T	C910
115	#N/A	2347133296	CAP,CHIP 125°C	CS 0805/X7R/50V 3300p K T	C912
116	#N/A	2347122296	CAP,CHIP 125°C	CS 0805/X7R/50V 2200P K T	C913
117	#N/A	2347115396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.015u K T	C917
118	#N/A	2364600996	DIODE,SWITCH SMD	BAV99 SOT-23 DIODES	D901 RA
119	#N/A	2364601096	DIODE,SWITCH SMD	BAV99 SOT-23 PHILIPS	D901 RB
120	E-Q-0402-7030	2360608596	FET,N-CH(SMD)	AP9960M SO-8 APEC	I902 RA
121	E-Q-0402-7031	2360608696	FET,N-CH(SMD)	AO4826 SO-8 AO	I902 RB
122	#N/A	2251426126	RES,CHIP 1/4	RC 1206 1/4 W 26.1Kohm F T	R808
123	#N/A	2253447096	RES,CHIP 1/4	RC 1206 1/4 W 47ohm J T	R809
124	E-R-0405-5990	2253310296	RES,CHIP 1/8	RC 0805 1/8 W 1Kohm J T	R811
125	#N/A	2253412396	RES,CHIP 1/4	RC 1206 1/4 W 12Kohm J T	R819
126	#N/A	2251322016	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm F T	R820
127	#N/A	2251310006	RES,CHIP 1/8	RC 0805 1/8 W 100 ohm F T	R821
128	#N/A	2251327416	RES,CHIP 1/8	RC 0805 1/8 W 2.74Kohm F T	R822
129	#N/A	2251320026	RES,CHIP 1/8	RC 0805 1/8 W 20Kohm F T	R823
130	#N/A	2253410196	RES,CHIP 1/4	RC 1206 1/4 W 100ohm J T	R827
131	#N/A	2251318026	RES,CHIP 1/8	RC 0805 1/8 W 18Kohm F T	R828
132	#N/A	2251343216	RES,CHIP 1/8	RC 0805 1/8 W 4.32Kohm F T	R829
133	#N/A	2253427196	RES,CHIP 1/4	RC 1206 1/4 W 270 ohm J T	R833
134	#N/A	2253351596	RES,CHIP 1/8	RC 0805 1/8 W 5.1Mohm J T	R903
135	E-R-0405-2983	2251382526	RES,CHIP 1/8	RC 0805 1/8W 82.5Kohm F T	R906
136	E-R-0405-7121	2251390926	RES,CHIP 1/8	RC 0805 1/8 W 90.9Kohm F T	R907
137	#N/A	2251310036	RES,CHIP 1/8	RC 0805 1/8 W 100Kohm F T	R908
138	E-R-0405-5997	2253322296	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm J T	R912
139	E-R-0405-5992	2253310196	RES,CHIP 1/8	RC 0805 1/8 W 100ohm J T	R915
140	#N/A	2251349916	RES,CHIP 1/8	RC 0805 1/8W 4.99Kohm F T	R918
141	#N/A	2251341206	RES,CHIP 1/8	RC 0805 1/8W 412 ohm F T	R921
142	#N/A	2251340206	RES,CHIP 1/8	RC 0805 1/8W 402 ohm F T	R924
143	B-MB-0201-0851	2202126901	PC BOARD	JT166W18 P/B CEMI 160*100 2.01	U801
144	#N/A	2297427212	CAP,PPP	PPN 2700P/250V P=10.0 K K	C806
145	E-C-0404-2272	2283110291	CAP,CER	CK45B 1000.000PF 500V K T	C808
146	E-C-0404-1838	2333610691	CAP,ELE 105°C	EC 10u/ 50V 5*11 P=5.0 T	C811
147	E-C-0405-4323	2301310391	CAP,MTL	CF93M 0.010UF 63V J T	C821 RA
148	E-C-0405-4324	2301510391	CAP,MTL	CF93M 0.010UF 100V J T	C821 RB
149	E-D-0403-2801	2362900495	TRANSIENT VOLTAGE SUPPRESSOR	P6K91A DO-15 PEC	D805 RA
150	E-D-0403-2802	2362900995	TRANSIENT VOLTAGE SUPPRESSOR	P6KE91A DO-15 WILLAS	D805 RB
151	#N/A	2363231995	DIODE,RECT	UF4007 PEC	D806 RA
152	#N/A	2363223195	DIODE,RECT	UF4007 GS	D806 RB
153	E-D-0403-1496	2363221495	DIODE,RECT	UF4005G PEC.	D807 RA
154	#N/A	2363223095	DIODE,RECT	UF4005 GS	D807 RB
155	#N/A	2363517695	DIODE,ZENER	HZ18-2 17.5-18.3V 0.5W HITACHI	D813
156	#N/A	2363516895	DIODE,ZENER	HZ6B-2 HITACHI	D906
157	E-FS-0410-0009	2213125207	FUSE	FUSE 2.5A/250V 21502.5 LITTEL	F801 RA
158	E-FS-0410-0102	2213125211	FUSE	FUSE 2.5A/250V SG501302.5 PICO	F801 RB
159	M-WR-0828-0460	2428106125	JUMPER	0.6 12.50MM	J804
160	E-R-0405-2725	2233410095	RES,CBN 1/4 S	RD 1/4WS 10.00 J T52 MINI	J805
161	M-WR-0828-0451	2428106150	JUMPER	0.6 15.00MM	J905
162	#N/A	2232656395	RES,CBN 1/2	RD 1/2W 56Kohm J T52	R806

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
163	#N/A	2232412295	RES,CBN 1/4	RD 1/4W 1.2Kohm P=10.0 J T	R824
164	#N/A	2242330595	HIGH VOLTAGE RESISTOR	RD 1/2W 3.00M J	R917
165	#N/A	2357568608	EC HI-RIPPLE 105C 400V	EC 68u/400V 16*32 P=7.5 S	C805
166	#N/A	2287147212	CAP,CER	CK45E 4700.000PF 250V A M KC	C823
167	#N/A	2275450901	CAP,CER	TC 5P/3KV SL P=7.5 J C	C911
168	#N/A	2365330300	IC,LINEAR	SG6841D DIP-8 SG	I801
169	E-PC-0411-0083	2362401800	PHOTO COUPLR	TLP621(D4-GR-LF2) TOSHIBA	I802
170	#N/A	2365330200	IC,LINEAR	OZ9RRAD PDIP-8 MICRO	I901
171	#N/A	2371118301	COIL,CHOKE	18mH 0.32mm*90TS UU-10.5	L805
172	#N/A	2371150901	COIL,CHOKE	5uH 0.5mm*19TS R3*15 I=2.0A	L807
173	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P H/B 1007#26 L=140/70mm	P801
174	E-TH-0416-0042	2229201212	THERMISTOR,PTH	SKC-103 10+-20% 3A THINKING	R802
175	#N/A	2235647013	RES,MTL 3	RS 3WS 47ohm J P=20.0	R826
176	#N/A	2407413100	SOCKET (AC INLET)	0711-2-P10-9 INALWAYS	S801 RA
177	#N/A	2407413300	SOCKET (AC INLET)	SC-8R-F15A9 SUPERCOM	S801 RB
178	#N/A	2374228004	XFORMER,POWR	ER-28 2UEW 0.27*2 32Ts 1.8mH	T801
179	#N/A	2374300700	XFORMER INVERTER	EEL-19 16/2080Ts 0.4/0.045mm	T901
180	#N/A	2361610600	FET,N-CH	PHX4NQ60E TO-220AB PHILIPS	Q801 RA
181	#N/A	2361610700	FET,N-CH	SSS4N60B TO-220F FAIRCHILD	Q801 RB
182	#N/A	2072260600	HEAT SINK	AL 72*20*T1.5MM	9H01
183	C-FP-0301-0966	2024266702	FRONT BEZEL	ABS 94 HB PS-7604B	1F01
184	M-MS-0808-9397	2053753701	LED INDIC.-PWR	VA521 PMMA 94HB	1F02
185	PL-FK-0709-0151	2044266102	FUNCTION KEY	VA521 ABS 94HB AL-PLATE	1F03
186	M-MS-0808-9213	2051352000	NAME PLATE	VIEWSONIC LOGO 3 PIN VA521	1F04
187	M-MS-0808-9214	2051352100	NAME PLATE	VIEWSONIC E015-006 3-BIRD LOGO	1F05
188	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	V901
189	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1F11
190	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1F12
191	#N/A	2072457300	INSULATOR	MYLAR BLACK 94V0 T=0.5 BOTTOM	1F13
192	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1F15
193	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1F16
194	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1F20
195	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1F21
196	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1F22
197	M-LB-0813-0959	2055613392	LABEL	VSC HIGH VOLTAGE WARNING LABEL	6P14
198	M-MS-0808-9218	2434410300	AL SHIELDING TAPE	W25*L30mm*T0.06 (AL)	K901
199	M-FC-0809-0794	2420309001	FFC CABLE	FFC 50P*0.5*L90mm	P981
200	C-BC-0302-0583	2022262202	CABI BACK	ABS 94HB PANTONE BLACK C=4001	2C01
201	M-MS-0808-9215	2051352200	NAME PLATE	VIEWSONIC E015-017	2C02
202	M-BK-0805-0070	2071869400	BRACKET,FIX	METAL PLATE 1.0MM KENSINGTON	2C03
203	M-LB-0813-0927	2055636019	LABEL	VA521 VLCDs27996-1W SMALL	6P05
204	M-LB-0813-0530	2055617101	LABEL	10*20 HI-POT TESTED 0K	6P13
205	M-LB-0830-0731	2055131817	LABEL	VA521 VLCDs27996-1W 040623	6P50
206	PL-PS-0715-0986	2028258002	STAND	ABS94HB PANTONE BLACK C=4001	5B01
207	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	5B02
208	M-LB-0813-0769	2055613293	LABEL	VIEWSONIC OPEN STAND LABEL-LCD	5B10
209	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	P961
210	M-MS-0808-9216	2106656300	HINGE	VA521 -5° ± 20° (F.S)	2C20 RA
211	M-MS-0808-9216	2106656301	HINGE	VA521 -5° ~+20° (T.L)	2C20 RB
212	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	2C21
213	A-PC-0106-0121	2427130046	POWER CORD	USA WALL 1.83M BLACK	P951
214	DC-00000278	2438501145	CD-OWNER GUIDE	VA521 WIZARD 031104 VER.A	6P80
215	M-MS-0808-9211	2002310369	GUARANT CARD	VIEWSONIC VA521 QSG	6P84
216	M-MS-0808-1316	2013222536	POLYETHY BAG	250mmx350mmx0.3 ADD>PE-LD<	6P85
217	#N/A	2011121002	CARTON BOX	VA521 VLCDs27996-1W 031225	6P01
218	M-LB-0813-0928	2055632038	LABEL	VA521 VLCDs27996-1W	6P02
219	P-FM-0602-0855	2012176900	POLYFOAM	VA521 EPS (L)	6P20
220	P-FM-0602-0856	2012177000	POLYFOAM	VA521 EPS (R)	6P21
221	M-LB-0813-0528	2055103400	LABEL	JK0936F WEN	6P52
222	M-MS-0808-0027	2013150901	POLYETHY BAG	700LX600WX0.03mm PE-LD ADD>PE	6P60

BOM LIST (VE510b-2)

ViewSonic Model Number: VLCD527996

Rev: 1a

Item	ViewSonic P/N	Ref. P/N	Description		Location	Q'ty
1	M-LB-0813-0856	2055613379	LABEL	ViewSonic CONTAINER LABEL	6P11	1/96
2	E-C-0404-3815	2346410496	CAP,CHIP 85°C	CS 0603/Y5V/50V 0.1u Z T	C116 C122 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C148 C149 C151 C154 C157 C158 C160 C161 C162 C163 C166 C167 C168 C169 C170 C172 C175 C178 C179 C180	33
3	E-R-0405-6409	2253210196	RES,CHIP 1/10W	RC 0603 1/10W 100 ohm J T	R103 R106 R108 R10 R112 R114 R116 R120 R132 R134 R135 R144 R145 R150 R151 R152 R153 R154 R155 R156 R176 R177 R186	23
4	E-D-0403-1667	2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5f TEMIC GS08	D101 RA D103 RA D104 RA D106 RA D107 RA D108 RA D113 RA D114 RA D116 RA D117 RA D119 RA D120 RA D121 RA D122 RA	14
5	E-D-0403-2041	2364600396	DIODE,SWITCH SMD	LL4148 DIODES MINIMELF	D101 RB D103 RB D104 RB D106 RB D107 RB D108 RB D113 RB D114 RB D116 RB D117 RB D119 RB D120 RB D121 RB D122 RB	14
6	M-WR-0828-0450	2428106075	JUMPER	0.6f 7.50MM	J801 J802 J803 J808 J809 J810 J811 J901 J902 J903 J909 J910 J911 J912	14
7	E-R-0405-6600	2253200096	RES,CHIP 1/10W	RC 0603 1/10W 0 ohm J T	L101 L102 L103 R102 R105 R107 R111 R125 R197	9
8	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	1F18 1F19	8
9	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	9S01 2C22	7
10	E-R-0405-6419	2253247296	RES,CHIP 1/10W	RC 0603 1/10W 4.7Kohm J T	R128 R129 R149 R157 R159 R163 R181	7
11	E-R-0405-6410	2253210296	RES,CHIP 1/10W	RC 0603 1/10W 1Kohm J T	R124 R130 R133 R161 R188 R192	6
12	#N/A	2336322613	CAP,MINI ELE 105°C	EC 22u/ 16V 4*7 P=2.5 T	C132 C144 C147 C159 C171 C181	6
13	#N/A	2346147396	CAP,CHIP 125°C	CS 0603/X7R/50V 0.047u K T	C102 RA C103 RA C104 RA C106 RA C107 RA C109 RA	6

Item	ViewSonic P/N	Ref. P/N	Description		Location	Q'ty
14	#N/A	2346247396	CAP,CHIP 125°C	CS 0603/X7R/25V 0.047u K T	C102 RB C103 RB C104 RB C106 RB C107 RB C109 RB	6
15	M-WR-0828-0478	2428106100	JUMPER	0.6f 10.00MM	J807 J904 J906 J907 J908 L802	6
16	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER O20*2TMM SQUARE GRAIN	5B03	5
17	#N/A	2336347613	CAP,MINI ELE 105°C	EC 47u/ 16V 5*7 P=2.5 T	C155 C164 C165 C176 C177	5
18	#N/A	2360100696	XISTOR,PNP R SMD	PMBS3906 SOT-23 PHILIPS	Q101 RA Q102 RA Q103 RA Q107 RA Q108 RA	5
19	E-Q-0402-1607	2360100796	XISTOR,PNP R SMD	MMBT3906 SOT-23 DIODES	Q101 RB Q102 RB Q103 RB Q107 RB Q108 RB	5
20	E-D-0403-0531	2363600195	DIODE,SWITCH	1N4148 DO-35 T	D808 D902 D903 D904 D905	5
21	E-L-0407-1535	2379820196	BEAD,HI-IMPEDANCE	Z= 200ohm(100MHZ~) 0805 200mA	L106 L107 L108 L109 L110	5
22	#N/A	2403702513	SWITCH,TACT	TSTA-2 4.3mm 160g HUA JIE	S701 S702 S703 S704 S705	5
23	M-MS-0808-9408	2061453400	BUSHING	VE710 PLUG RUBBER	2C04	4
24	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	1F14	4
25	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	5B06	4
26	#N/A	2105251400	SPRING PLATE	SPTE T=0.4MM (GROUND PLATE)	9H10	4
27	#N/A	2251439086	RES,CHIP 1/4	RC 1206 1/4 W 3.9 ohm F T	R813 R814 R815 R816	4
28	E-R-0405-6411	2253210396	RES,CHIP 1/10W	RC 0603 1/10W 10Kohm J T	R146 R180 R190 R199	4
29	E-R-0405-6604	2253222296	RES,CHIP 1/10W	RC 0603 1/10W 2.2Kohm J T	R118 R119 R139 R140	4
30	E-R-0405-5989	2253310096	RES,CHIP 1/8	RC 0805 1/8 W 10ohm J T	R904 R905 R910 R911	4
31	#N/A	2253410096	RES,CHIP 1/4	RC 1206 1/4 W 10ohm J T	R807 R810 R818 R831	4
32	#N/A	2259210308	RES,CHIP NETWORKS	8P4R 1/16W 10Kohm J P=0.8	RN1 RN2 RN3 RN4	4
33	E-C-0404-4423	2341122096	CAP,CHIP 125°C	CS 0603/COG/50V 22p J T	C119 C121 C145 C146	4
34	E-C-0404-4224	2341147096	CAP,CHIP 125°C	CS 0603/COG/50V 47p J T	C111 C113 C114 C115	4
35	E-D-0403-1105	2363217595	DIODE,RECT	20D8 IR	D801 RA D802 RA D803 RA D804 RA	4
36	E-D-0403-1531	2363221195	DIODE,RECT	PG208 PEC	D801 RB D802 RB D803 RB D804 RB	4
37	M-LB-0813-0002	2056603050	SERIAL LABEL	VIEWSONIC LCD SERIAL LABEL	6P55 6P54 6P51	3
38	M-MS-0808-0854	2097400301	EYELET	BSS3-1/2H T=0.25 SN 3µm	E801 E802 E803	3
39	#N/A	2251275096	RES,CHIP 1/10	RC 0603 1/10W 75 ohm F T	R104 R109 R113	3
40	E-R-0405-6603	2253222096	RES,CHIP 1/10W	RC 0603 1/10W 22 ohm J T	R171 R172 R195	3
41	E-R-0405-5988	2253300096	RES,CHIP 1/8	RC 0805 1/8 W 0ohm J T	L115 R165 R189	3
42	#N/A	2335310841	CAP,ELE LOW ESR 105°C	EC 1000u/ 16V 10*16 P=5.0 C	C816 C817 C819	3
43	E-C-0404-3898	2341110096	CAP,CHIP 125°C	CS 0603/COG/50V 10p J T	C101 C105 C108	3
44	#N/A	2347110496	CAP,CHIP 125°C	CS 0805/X7R/50V 0.1u K T	C813 C909 C916	3
45	E-Q-0402-0428	2361302591	XISTOR,NPN R	2SC945(P) TO-92 NEC	Q802 RB Q903 RB Q905 RB	3
46	E-Q-0402-0718	2361316191	XISTOR,NPN R	2PC945P PHILIPS	Q802 RA Q903 RA Q905 RA	3
47	E-D-0403-1779	2364503996	DIODE,ZENER SMD	BZV55-C5V6 PHILIPS	D105 RA D111 RA D112 RA	3
48	E-D-0403-2808	2364505616	DIODE,ZENER SMD	TZMC5V6 SOD-80 5.2V~6V VISHAY	D105 RB D111 RB D112 RB	3
49	#N/A	2379520196	BEAT,HI-CURRENT	Z= 200ohm 0805 I=2.0A	L111 L112 L113	3
50	M-WR-0828-0455	2428106050	JUMPER	0.6f 5.00MM	J806 J812 L804	3

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
51	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94HB AL-PALTE	5B07 2
52	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1F17 1F23 2
53	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	5B05 2
54	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	5B04 2
55	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2C23 2
56	E-R-0405-7169	2232491495	RES,CBN 1/4	RD 1/4W 910Kohm P=7.5 J T	R804 R805 2
57	E-R-0405-3443	2233447995	RES,CBN 1/4 S	RD 1/4WS 4.70 J T52 MINI	R901 R902 2
58	#N/A	2251400096	RES,CHIP 1/4	RC 1/4W 0.00 F	F901 R925 2
59	E-R-0405-6601	2253210596	RES,CHIP 1/10W	RC 0603 1/10W 1Mohm J T	R127 R158 2
60	E-R-0405-5991	2253310396	RES,CHIP 1/8	RC 0805 1/8 W 10Kohm J T	R812 R916 2
61	#N/A	2253310596	RES,CHIP 1/8	RC 0805 1/8 W 1Mohm J T	R909 R920 2
62	E-R-0405-6001	2253347296	RES,CHIP 1/8	RC 0805 1/8 W 4.7Kohm J T	R183 R196 2
63	#N/A	2253422096	RES,CHIP 1/4	RC 1206 1/4 W 22 ohm J T	R817 R832 2
64	#N/A	2253456496	RES,CHIP 1/4	RC 1206 1/4 W 560Kohm J T	R803 R830 2
65	#N/A	2275420001	CAP,CER	TC 20P/3KV SL P=7.5 J C	C914 C915 2
66	#N/A	2284110291	CAP,CER	CC 1000P/1KV X7R P=5.0 K T	C814 C815 2
67	#N/A	2287133212	CAP,CER	Y1 CAP 3300P/250V K T	C802 C803 2
68	E-C-0404-4834	2300922401	CAP,MTL MINI	X2 0.22u/275V P=15.0 M C	C801 C804 2
69	E-C-0404-3890	2333347701	CAP,ELE 105°C	EC 470u/ 16V 10*12.5 P=5.0 C	C901 C820 2
70	#N/A	2333547691	CAP,ELE 105°C	EC 47u/ 35V 6.3*11 P=5.0 T	C810 C919 2
71	#N/A	2344133296	CAP,CHIP 125°C	CS 1206/COG/50V 3300P J T	C903 C904 2
72	E-Q-0402-1180	2360301296	XISTOR,NPN R SMD	MMBT3904 SOT-23 DIODES	Q106 RB Q109 RB 2
73	E-Q-0402-1624	2360301696	XISTOR,NPN R SMD	PMBS3904 SOT-23 PHILIPS	Q106 RA Q109 RA 2
74	#N/A	2360608496	FET,N-CH(SMD)	2N7002K SOT-23 VISHAY	Q901 Q902 2
75	E-Q-0402-0839	2361111191	XISTOR,PNP R	2SA1020(Y) TO-92 TOSHIBA	Q105 Q803 2
76	E-D-0403-1501	2363231612	DIODE,RECT	31DF2 IR(NI)	D809 D811 2
77	E-IC-0401-2152	2365321991	IC,LINEAR	KA431AZTA TO-92 FAIRCHILD	I803 RB I804RB 2
78	#N/A	2365328191	IC,LINEAR	AP431VA TO-92 ATC	I803 RA I804RA 2
79	#N/A	2379312196	BEAD,HI-IMPEDANCE	Z= 120ohm(100MHZ~) 0603 200mA	L104 L105 2
80	#N/A	2404380202	CONNECTOR	WBT CONN. P=8.0mm 2P	P901 P902 2
81	#N/A	2407200991	HOLDER,FUSE	CQ-05T (5mm DIA FUSE)	S802 S803 2
82	C-FP-0301-0991	2024266704	FRONT BEZEL	ABS 94 HB MIDNIGHT GRAY	1F01 1
83	M-MS-0808-9397	2053753701	LED INDIC.-PWR	VA521 PMMA 94HB	1F02 1
84	PL-FK-0709-0151	2044266102	FUNCTION KEY	VA521 ABS 94HB AL-PLATE	1F03 1
85	M-MS-0808-9213	2051352000	NAME PLATE	VIEWSONIC LOGO 3 PIN VA521	1F04 1
86	M-MS-0808-9214	2051352100	NAME PLATE	VIEWSONIC E015-006 3-BIRD LOGO	1F05 1
87	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1F11 1
88	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1F12 1
89	#N/A	2072457300	INSULATOR	MYLAR BLACK 94V0 T=0.5 BOTTOM	1F13 1
90	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1F15 1
91	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1F16 1
92	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1F20 1
93	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1F21 1
94	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1F22 1
95	C-BC-0302-0597	2022262203	CABI BACK	ABS 94HBMIDNIGHT GRAY	2C01 1
96	M-MS-0808-9396	2051352202	NAME PLATE	NAME PLATE VIEWSONIC E015-027	2C02 1
97	M-BK-0805-0070	2071869400	BRACKET,FIX	METAL PLATE 1.0MM KENSINGTON	2C03 1
98	M-MS-0808-9216	2106656300	HINGE	VA521 -5° + 20 °(F.S)	2C20 RA 1
99	M-MS-0808-9216	2106656301	HINGE	VA521 -5° ~+20° (T.L)	2C20 RB 1
100	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	2C21 1
101	PL-PS-0715-0992	2028258003	STAND	ABS94HBMIDNIGHT GRAY	5B01 1
102	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	5B02 1
103	M-LB-0813-0769	2055613293	LABEL	VIEWSONIC OPEN STAND LABEL-LCD	5B10 1
104	P-BX-0601-0970	2011121007	CARTON BOX	VE510B-2 VLCDSD27996-3W 040728	6P01 1
105	M-LB-0813-0981	2055632063	LABEL	VE510B-2 VLCDSD27996-3W M	6P02 1
106	M-LB-0813-0855	2055613281	LABEL	ViewSonic VA520 NUMBER STICKER	6P03 1
107	M-LB-0813-0982	2055636024	LABEL	VE510B-2 VLCDSD27996-3W SMALL	6P05 1
108	M-LB-0813-0530	2055617101	LABEL	10*20 HI-POT TESTED OK	6P13 1
109	M-LB-0813-0959	2055613392	LABEL	VSC HIGH VOLTAGE WARNING LABEL	6P14 1
110	P-FM-0602-0855	2012176900	POLYFOAM	VA521 EPS (L)	6P20 1
111	P-FM-0602-0856	2012177000	POLYFOAM	VA521 EPS (R)	6P21 1
112	M-LB-0830-0714	2055131836	LABEL	VE510B-2 VLCDSD27996-3W 040728	6P50 1
113	M-LB-0813-0528	2055103400	LABEL	JK0936F WEN	6P52 1
114	M-MS-0808-0027	2013150901	POLYETHY BAG	700LX600WX0.03tmm PE-LD ADD>PE	6P60 1
115	A-CD-VE510B-2	2438501148	CD-OWNER GUIDE	VE510B-2 WIZARD DATA:20040205	6P80 1
116	M-MS-0808-9395	2002310388	GUARANT CARD	VIEWSONIC VE510B-2 QSG	6P84 1
117	M-MS-0808-1316	2013222536	POLYETHY BAG	250mmx350mmxt0.3 ADD>PE-LD<	6P85 1
118	#N/A	2072260600	HEAT SINK	AL 72*20*T1.5MM	9H01 1
119	#N/A	2336310613	CAP,MINI ELE 105°C	EC 10u/ 16V 4*7 P=2.5 T	C117 1
120	#N/A	2336310713	CAP,MINI ELE 105°C	EC 100u/ 16V 6.3*7 P=2.5 T	C156 1
121	#N/A	2357568608	EC HI-RIPPLE 105C 400V	EC 68u/400V 16*32 P=7.5 S	C805 1
122	#N/A	2297427212	CAP,PPP	PPN 2700P/250V P=10.0 K K	C806 1
123	E-C-0404-2272	2283110291	CAP,CER	CK45B 1000.000PF 500V K T	C808 1
124	E-C-0404-5329	2349110396	CAP,CHIP 125°C	CS 1206/X7R/50V 0.01u K T	C809 1
125	E-C-0404-1838	2333610691	CAP,ELE 105°C	EC 10u/ 50V 5*11 P=5.0 T	C811 1
126	E-C-0405-4323	2301310391	CAP,MTL	CF93M 0.010UF 63V J T	C821 RA 1

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
127	E-C-0405-4324	2301510391	CAP,MTL	CF93M 0.010UF 100V J T	C821 RB 1
128	#N/A	2287147212	CAP,CER	CK45E 4700.000PF 250VA M KC	C823 1
129	E-C-0404-4212	2347410596	CAP,CHIP 85°C	CS 0805/Y5V/50V 1.0u Z T	C902 1
130	#N/A	2347427396	CAP,CHIP 85°C	CS 0805/Y5V/50V 0.027u Z T	C905 1
131	#N/A	2342133196	CAP,CHIP 125°C	CS 0805/COG/50V 330p J T	C906 1
132	#N/A	2342127096	CAP,CHIP 125°C	CS 0805/COG/50V 27p J T	C907 1
133	#N/A	2347647596	CAP,CHIP 85°C	CS 0805/Y5V/16V 4.7u Z T	C908 1
134	#N/A	2347110396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.01u K T	C910 1
135	#N/A	2275450901	CAP,CER	TC 5P/3KV SL P=7.5 J C	C911 1
136	#N/A	2347133296	CAP,CHIP 125°C	CS 0805/X7R/50V 3300p K T	C912 1
137	#N/A	2347122296	CAP,CHIP 125°C	CS 0805/X7R/50V 2200P K T	C913 1
138	#N/A	2347115396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.015u K T	C917 1
139	M-MS-0808-6352	2363703800	LED	LED 3f GRN/YEL	D701 1
140	E-D-0403-2801	2362900495	TRANSIENT VOLTAGE SUPPRESSOR	P6K91A DO-15 PEC	D805 RA 1
141	E-D-0403-2802	2362900995	TRANSIENT VOLTAGE SUPPRESSOR	P6KE91A DO-15 WILLAS	D805 RB 1
142	#N/A	2363231995	DIODE,RECT	UF4007 PEC	D806 RA 1
143	#N/A	2363223195	DIODE,RECT	UF4007 GS	D806 RB 1
144	E-D-0403-1496	2363221495	DIODE,RECT	UF4005G PEC.	D807 RA 1
145	#N/A	2363223095	DIODE,RECT	UF4005 GS	D807 RB 1
146	#N/A	2363517695	DIODE,ZENER	HZ18-2 17.5-18.3V 0.5W HITACHI	D813 1
147	#N/A	2364600996	DIODE,SWITCH SMD	BAV99 SOT-23 DIODES	D901 RA 1
148	#N/A	2364601096	DIODE,SWITCH SMD	BAV99 SOT-23 PHILIPS	D901 RB 1
149	#N/A	2363516895	DIODE,ZENER	HZ6B-2 HITACHI	D906 1
150	E-FS-0410-0009	2213125207	FUSE	FUSE 2.5A/250V 21502.5 LITTEL	F801 RA 1
151	E-FS-0410-0102	2213125211	FUSE	FUSE 2.5A/250V SG501302.5 PICO	F801 RB 1
152	E-IC-0401-4046	2365930996	IC,DIGITAL SMD	RTD2013 PQFP128 Realtek	I101 1
153	E-IC-0450-0041	2365929996	IC,DIGITAL SMD	MTV312M64-AJ PLCC44 MYSON	I104 1
154	E-IC-0401-2269	2365915896	IC,DIGITAL SMD	24LC16B/SN MICROCHIP SO08	I105 RA 1
155	#N/A	2365100996	IC,MEMORY	AT24C16AN-10SI-2.7 SOIC8 ATMEL	I105 RB 1
156	#N/A	2365812696	IC,LINEAR(SMD)	CM2860KIM223 SOT-223 CHAMPION	I106 RA 1
157	#N/A	2365813196	IC,LINEAR(SMD)	AME8805DEGT SOT-223 AME	I106 RB 1
158	#N/A	2365330300	IC,LINEAR	SG6841D DIP-8 SG	I801 1
159	E-PC-0411-0083	2362401800	PHOTO COUPLR	TLP621(D4-GR-LF2) TOSHIBA	I802 1
160	#N/A	2365330200	IC,LINEAR	OZ9RRAD PDIP-8 MICRO	I901 1
161	E-Q-0402-7030	2360608596	FET,N-CH(SMD)	AP9960M SO-8 APEC	I902 RA 1
162	E-Q-0402-7031	2360608696	FET,N-CH(SMD)	AO4826 SO-8 AO	I902 RB 1
163	M-WR-0828-0460	2428106125	JUMPER	0.6f 12.50MM	J804 1
164	E-R-0405-2725	2233410095	RES,CBN 1/4 S	RD 1/4WS 10.00 J T52 MINI	J805 1
165	M-WR-0828-0451	2428106150	JUMPER	0.6f 15.00MM	J905 1
166	M-MS-0808-9218	2434410300	AL SHIELDING TAPE	W25*L30mm*T0.06 (AL)	K901 1
167	#N/A	2371118301	COIL,CHOKE	18mH 0.32mm*90TS UU-10.5	L805 1
168	#N/A	2371150901	COIL,CHOKE	5uH 0.5mm*19Ts R3*15 I=2.0A	L807 1
169	#N/A	2404301112	CONNECTOR	JST PH 13P SIDE P=2.0 OR EQUAL	P101 1
170	M-MS-0808-6355	2404301107	CONNECTOR	JST PH 8P SIDE P=2.0 OR EQUAL	P104 1
171	#N/A	2404371008	CONNECTOR	JST PH 9P TOP P=2.0 OR EQUAL	P105 1
172	#N/A	2407630250	SOCKET,SMD	6240-50-OR5P 0.5*50P KYOCERA	P107 RA 1
173	#N/A	2407630350	SOCKET,SMD	2206BL11250RLP 0.5*50P FRANCON	P107 RB 1
174	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	P701 1
175	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P H/B 1007#26 L=140/70mm	P801 1
176	A-PC-0106-0121	2427130046	POWER CORD	USA WALL 1.83M BLACK	P951 1
177	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	P961 1
178	M-FC-0809-0794	2420309001	FFC CABLE	FFC 50P*0.5*L90mm	P981 1
179	#N/A	2360501396	FET,P-CH SMD	AP2305N SOT-23 APEC	Q104 RA 1
180	#N/A	2360501296	FET,P-CH SMD	AO3411 SOT-23 ALPHA	Q104 RB 1
181	#N/A	2361610600	FET,N-CH	PHX4NQ60E TO-220AB PHILIPS	Q801 RA 1
182	#N/A	2361610700	FET,N-CH	SSS4N60B TO-220F FAIRCHILD	Q801 RB 1
183	#N/A	2251290916	RES,CHIP 1/10	RC 0603 1/10W 9.09Kohm F T	R142 1
184	#N/A	2251233216	RES,CHIP 1/10	RC 0603 1/10W 3.32Kohm F T	R148 1
185	E-R-0405-7000	2253222196	RES,CHIP 1/10W	RC 0603 1/10W 220 ohm J T	R182 1
186	E-R-0405-6605	2253227296	RES,CHIP 1/10W	RC 0603 1/10W 2.7Kohm J T	R191 1
187	E-TH-0416-0042	2229201212	THERMISTOR,PTH	SCK-103 10+-20% 3A THINKING	R802 1
188	#N/A	2232656395	RES,CBN 1/2	RD 1/2W 56Kohm J T52	R806 1
189	#N/A	2251426126	RES,CHIP 1/4	RC 1206 1/4 W 26.1Kohm F T	R808 1
190	#N/A	2253447096	RES,CHIP 1/4	RC 1206 1/4 W 47ohm J T	R809 1
191	E-R-0405-5990	2253310296	RES,CHIP 1/8	RC 0805 1/8 W 1Kohm J T	R811 1
192	#N/A	2253412396	RES,CHIP 1/4	RC 1206 1/4 W 12Kohm J T	R819 1
193	#N/A	2251322016	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm F T	R820 1
194	#N/A	2251310006	RES,CHIP 1/8	RC 0805 1/8 W 100 ohm F T	R821 1
195	#N/A	2251327416	RES,CHIP 1/8	RC 0805 1/8 W 2.74Kohm F T	R822 1
196	#N/A	2251320026	RES,CHIP 1/8	RC 0805 1/8 W 20Kohm F T	R823 1
197	#N/A	2232412295	RES,CBN 1/4	RD 1/4W 1.2Kohm P=10.0 J T	R824 1
198	#N/A	2235647013	RES,MTL 3	RS 3WS 47ohm J P=20.0	R826 1
199	#N/A	2253410196	RES,CHIP 1/4	RC 1206 1/4 W 100ohm J T	R827 1
200	#N/A	2251318026	RES,CHIP 1/8	RC 0805 1/8 W 18Kohm F T	R828 1
201	#N/A	2251343216	RES,CHIP 1/8	RC 0805 1/8 W 4.32Kohm F T	R829 1
202	#N/A	2253427196	RES,CHIP 1/4	RC 1206 1/4 W 270 ohm J T	R833 1

Item	ViewSonic P/N	Ref. P/N	Description		Location	Q'ty
203	#N/A	2253351596	RES,CHIP 1/8	RC 0805 1/8 W 5.1Mohm J T	R903	1
204	E-R-0405-2983	2251382526	RES,CHIP 1/8	RC 0805 1/8W 82.5Kohm F T	R906	1
205	E-R-0405-7121	2251390926	RES,CHIP 1/8	RC 0805 1/8 W 90.9Kohm F T	R907	1
206	#N/A	2251310036	RES,CHIP 1/8	RC 0805 1/8 W 100Kohm F T	R908	1
207	E-R-0405-5997	2253322296	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm J T	R912	1
208	E-R-0405-5992	2253310196	RES,CHIP 1/8	RC 0805 1/8 W 100ohm J T	R915	1
209	#N/A	2242330595	HIGH VOLTAGE RESISTOR	RD 1/2W 3.00M J	R917	1
210	#N/A	2251349916	RES,CHIP 1/8	RC 0805 1/8W 4.99Kohm F T	R918	1
211	#N/A	2251341206	RES,CHIP 1/8	RC 0805 1/8W 412 ohm F T	R921	1
212	#N/A	2251340206	RES,CHIP 1/8	RC 0805 1/8W 402 ohm F T	R924	1
213	#N/A	2259222008	RES,CHIP NETWORKS	8P4R 1/16W 22 ohm J P=0.8	RN6	1
214	#N/A	2407413100	SOCKET (AC INLET)	0711-2-P10-9 INALWAYS	S801 RA	1
215	#N/A	2407413300	SOCKET (AC INLET)	SC-8R-F15A9 SUPERCOM	S801 RB	1
216	#N/A	2374228004	XFORMER,POWR	ER-28 2UEW 0.27*2 32Ts 1.8mH	T801	1
217	#N/A	2374300700	XFORMER INVERTER	EEL-19 16/2080Ts 0.4/0.045mm	T901	1
218	#N/A	2202518300	PCB MULTILAYER	VA521(A) M/B FR4*2 100*82	U101	1
219	#N/A	2202127100	PC BOARD	VA521 KEY/B FR1 115*31	U701	1
220	B-MB-0201-0851	2202126901	PC BOARD	JT166W18 P/B CEM1 160*100 2.01	U801	1
221	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	V901	1
222	E-X-0415-0119	2369103601	XTAL,OSC	12.000MHZ/49US	X101	1
223	E-X-0415-0112	2369103901	XTAL,OSC	24.576MHZ/49US	X102	1

BOM LIST (VE510s-2)

ViewSonic Model Number: VLCD827996

Rev: 1a

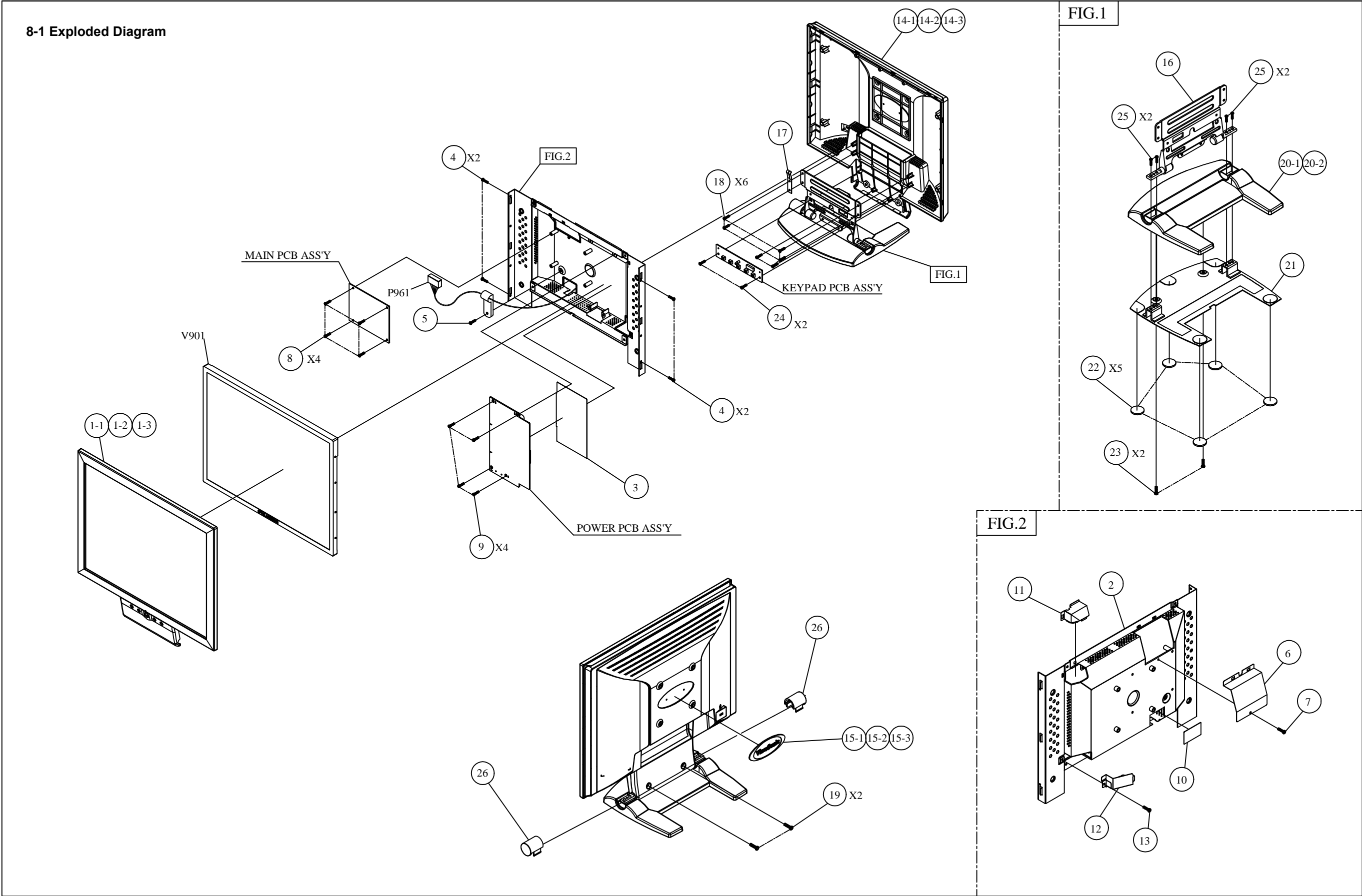
Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
1	M-LB-0813-0856	2055613379	LABEL	ViewSonic CONTAINER LABEL	6P11
2	E-C-0404-3815	2346410496	CAP,CHIP 85°C	CS 0603/Y5V/50V 0.1u Z T	C116 C122 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C148 C149 C151 C154 C157 C158 C160 C161 C162 C163 C166 C167 C168 C169 C170 C172 C175 C178 C179 C180
3	E-R-0405-6409	2253210196	RES,CHIP 1/10W	RC 0603 1/10W 100 ohm J T	R103 R106 R108 R10 R112 R114 R116 R120 R132 R134 R135 R144 R145 R150 R151 R152 R153 R154 R155 R156 R176 R177 R186
4	E-D-0403-1667	2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5f TEMIC GS08	D101 RA D103 RA D104 RA D106 RA D107 RA D108 RA D113 RA D114 RA D116 RA D117 RA D119 RA D120 RA D121 RA D122 RA
5	E-D-0403-2041	2364600396	DIODE,SWITCH SMD	LL4148 DIODES MINIMELF	D101 RB D103 RB D104 RB D106 RB D107 RB D108 RB D113 RB D114 RB D116 RB D117 RB D119 RB D120 RB D121 RB D122 RB
6	M-WR-0828-0450	2428106075	JUMPER	0.6f 7.50MM	J801 J802 J803 J808 J809 J810 J811 J901 J902 J903 J909 J910 J911 J912
7	E-R-0405-6600	2253200096	RES,CHIP 1/10W	RC 0603 1/10W 0 ohm J T	L101 L102 L103 R102 R105 R107 R111 R125 R197
8	M-SCW-0824-0811	2080003700	SCREW,SPE	ISZZTER001A M3*6L MSWR17/FZMY1	1F18 1F19
9	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	9S01 2C22
10	E-R-0405-6419	2253247296	RES,CHIP 1/10W	RC 0603 1/10W 4.7Kohm J T	R128 R129 R149 R157 R159 R163 R181
11	#N/A	2346147396	CAP,CHIP 125°C	CS 0603/X7R/50V 0.047u K T	C102 RA C103 RA C104 RA C106 RA C107 RA C109 RA
12	#N/A	2346247396	CAP,CHIP 125°C	CS 0603/X7R/25V 0.047u K T	C102 RB C103 RB C104 RB C106 RB C107 RB C109 RB
13	#N/A	2336322613	CAP,MINI ELE 105°C	EC 22u/ 16V 4*7 P=2.5 T	C132 C144 C147 C159 C171 C181
14	M-WR-0828-0478	2428106100	JUMPER	0.6f 10.00MM	J807 J904 J906 J907 J908 L802
15	E-R-0405-6410	2253210296	RES,CHIP 1/10W	RC 0603 1/10W 1Kohm J T	R124 R130 R133 R161 R188 R192
16	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER O20*2TMM SQUARE GRAIN	5B03
17	#N/A	2336347613	CAP,MINI ELE 105°C	EC 47u/ 16V 5*7 P=2.5 T	C155 C164 C165 C176 C177
18	E-D-0403-0531	2363600195	DIODE,SWITCH	1N4148 DO-35 T	D808 D902 D903 D904 D905
19	E-L-0407-1535	2379820196	BEAD,HI-IMPEDANCE	Z= 200ohm(100MHZ~) 0805 200mA	L106 L107 L108 L109 L110
20	#N/A	2360100696	XISTOR,PNP R SMD	PMBS3906 SOT-23 PHILIPS	Q101 RA Q102 RA Q103 RA Q107 RA Q108 RA

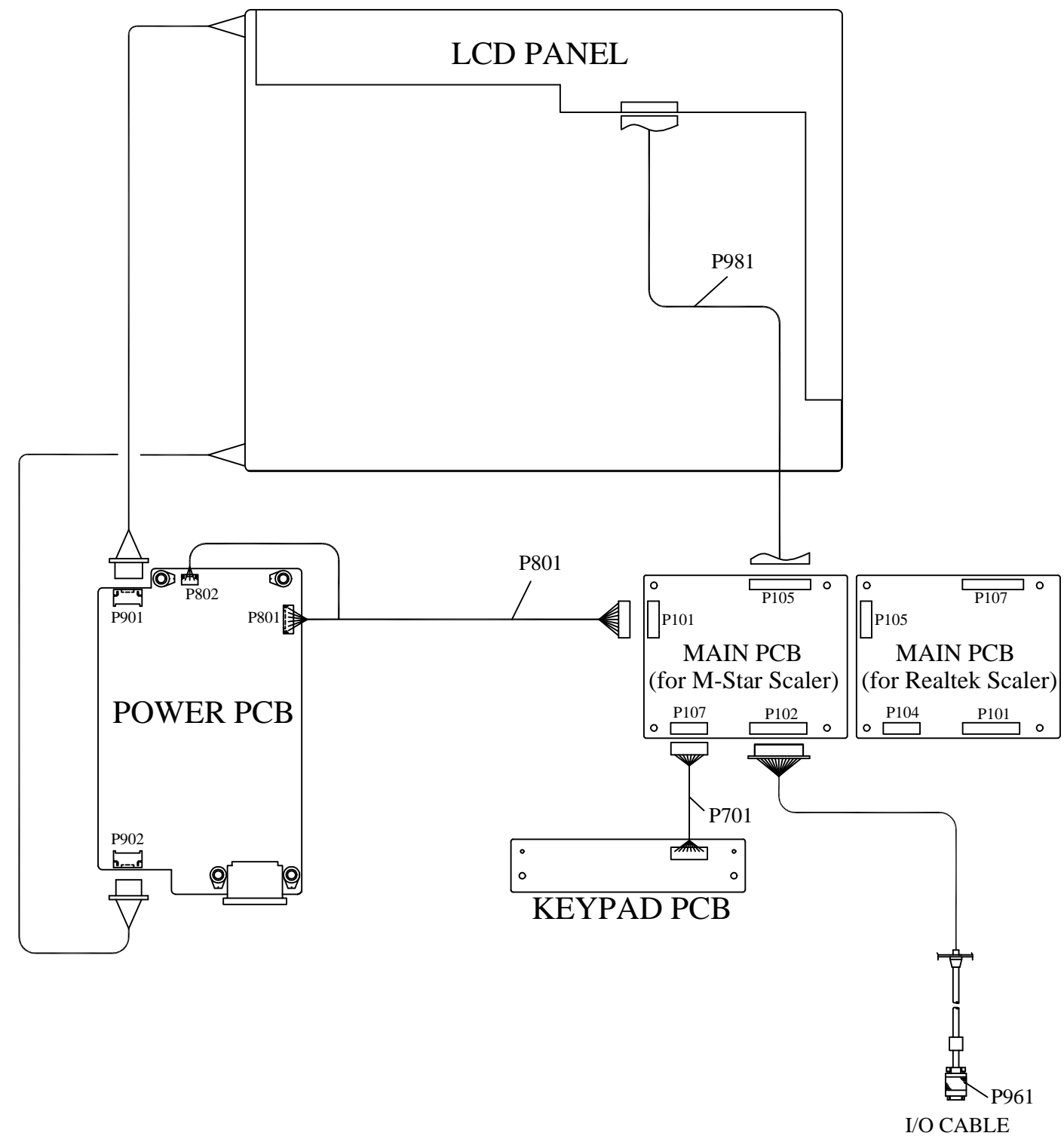
Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty	
21	E-Q-0402-1607	2360100796	XISTOR,PNP R SMD	MMBT3906 SOT-23 DIODES	Q101 RB Q102 RB Q103 RB Q107 RB Q108 RB	5
22	#N/A	2403702513	SWITCH,TACT	TSTA-2 4.3mm 160g HUA JIE	S701 S702 S703 S704 S705	5
23	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	1F14	4
24	M-MS-0808-9408	2061453400	BUSHING	VE710 PLUG RUBBER	2C04	4
25	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	5B06	4
26	#N/A	2105251400	SPRING PLATE	SPT T=0.4MM (GROUND PLATE)	9H10	4
27	E-C-0404-4224	2341147096	CAP,CHIP 125°C	CS 0603/COG/50V 47p J T	C111 C113 C114 C115	4
28	E-C-0404-4423	2341122096	CAP,CHIP 125°C	CS 0603/COG/50V 22p J T	C119 C121 C145 C146	4
29	E-D-0403-1105	2363217595	DIODE,RECT	20D8 IR	D801 RA D802 RA D803 RA D804 RA	4
30	E-D-0403-1531	2363221195	DIODE,RECT	PG208 PEC	D801 RB D802 RB D803 RB D804 RB	4
31	E-R-0405-6604	2253222296	RES,CHIP 1/10W	RC 0603 1/10W 2.2Kohm J T	R118 R119 R139 R140	4
32	E-R-0405-6411	2253210396	RES,CHIP 1/10W	RC 0603 1/10W 10Kohm J T	R146 R180 R190 R199	4
33	#N/A	2253410096	RES,CHIP 1/4	RC 1206 1/4 W 10ohm J T	R807 R810 R818 R831	4
34	#N/A	2251439086	RES,CHIP 1/4	RC 1206 1/4 W 3.9 ohm F T	R813 R814 R815 R816	4
35	E-R-0405-5989	2253310096	RES,CHIP 1/8	RC 0805 1/8 W 10ohm J T	R904 R905 R910 R911	4
36	#N/A	2259210308	RES,CHIP NETWORKS	8P4R 1/16W 10Kohm J P=0.8	RN1 RN2 RN3 RN4	4
37	M-LB-0813-0002	2056603050	SERIAL LABEL	VIEWSONIC LCD SERIAL LABEL	6P55 6P54 6P51	3
38	E-C-0404-3898	2341110096	CAP,CHIP 125°C	CS 0603/COG/50V 10p J T	C101 C105 C108	3
39	#N/A	2347110496	CAP,CHIP 125°C	CS 0805/X7R/50V 0.1u K T	C813 C909 C916	3
40	#N/A	2335310841	CAP,ELE LOW ESR 105°C	EC 1000u/ 16V 10*16 P=5.0 C	C816 C817 C819	3
41	E-D-0403-1779	2364503996	DIODE,ZENER SMD	BZV55-C5V6 PHILIPS	D105 RA D111 RA D112 RA	3
42	E-D-0403-2808	2364505616	DIODE,ZENER SMD	TZMC5V6 SOD-80 5.2V~6V VISHAY	D105 RB D111 RB D112 RB	3
43	M-MS-0808-0854	2097400301	EYELET	BSS3-1/2H T=0.25 SN 3µm	E801 E802 E803	3
44	M-WR-0828-0455	2428106050	JUMPER	0.6f 5.00MM	J806 J812 L804	3
45	#N/A	2379520196	BEAT,HI-CURRENT	Z= 200ohm 0805 I=2.0A	L111 L112 L113	3
46	E-R-0405-5988	2253300096	RES,CHIP 1/8	RC 0805 1/8 W 0ohm J T	L115 R165 R189	3
47	E-Q-0402-0718	2361316191	XISTOR,NPN R	2PC945P PHILIPS	Q802 RA Q903 RA Q905 RA	3
48	E-Q-0402-0428	2361302591	XISTOR,NPN R	2SC945(P) TO-92 NEC	Q802 RB Q903 RB Q905 RB	3
49	#N/A	2251275096	RES,CHIP 1/10	RC 0603 1/10W 75 ohm F T	R104 R109 R113	3
50	E-R-0405-6603	2253222096	RES,CHIP 1/10W	RC 0603 1/10W 22 ohm J T	R171 R172 R195	3
51	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1F17 1F23	2
52	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2C23	2
53	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	5B04	2
54	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	5B05	2
55	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94HB AL-PALTE	5B07	2
56	E-C-0404-4834	2300922401	CAP,MTL MINI	X2 0.22u/275V P=15.0 M C	C801 C804	2
57	#N/A	2287133212	CAP,CER	Y1 CAP 3300P/250V K T	C802 C803	2
58	#N/A	2333547691	CAP,ELE 105°C	EC 47u/ 35V 6.3*11 P=5.0 T	C810 C919	2
59	#N/A	2284110291	CAP,CER	CC 1000P/1KV X7R P=5.0 K T	C814 C815	2
60	E-C-0405-4323	2301310391	CAP,MTL	CF93M 0.010UF 63V J T	C821 RA C821 RB	2
61	E-C-0404-3890	2333347701	CAP,ELE 105°C	EC 470u/ 16V 10*12.5 P=5.0 C	C901 C820	2
62	#N/A	2344133296	CAP,CHIP 125°C	CS 1206/COG/50V 3300P J T	C903 C904	2
63	#N/A	2275420001	CAP,CER	TC 20P/3KV SL P=7.5 J C	C914 C915	2
64	E-D-0403-1501	2363231612	DIODE,RECT	31DF2 IR(NI)	D809 D811	2
65	#N/A	2251400096	RES,CHIP 1/4	RC 1/4W 0.00 F	F901 R925	2
66	#N/A	2365328191	IC,LINEAR	AP431VA TO-92 ATC	I803 RA I804 RA	2
67	E-IC-0401-2152	2365321991	IC,LINEAR	KA431AZTA TO-92 FAIRCHILD	I803 RB I804 RB	2
68	#N/A	2379312196	BEAD,HI-IMPEDANCE	Z= 120ohm(100MHZ~) 0603 200mA	L104 L105	2
69	#N/A	2404380202	CONNECTOR	WBT CONN. P=8.0mm 2P	P901 P902	2
70	E-Q-0402-0839	2361111191	XISTOR,PNP R	2SA1020(Y) TO-92 TOSHIBA	Q105 Q803	2
71	E-Q-0402-1624	2360301696	XISTOR,NPN R SMD	PMBS3904 SOT-23 PHILIPS	Q106 RA Q109 RA	2
72	E-Q-0402-1180	2360301296	XISTOR,NPN R SMD	MMBT3904 SOT-23 DIODES	Q106 RB Q109 RB	2
73	#N/A	2360608496	FET,N-CH(SMD)	2N7002K SOT-23 VISHAY	Q901 Q902	2
74	E-R-0405-6601	2253210596	RES,CHIP 1/10W	RC 0603 1/10W 1Mohm J T	R127 R158	2
75	E-R-0405-6001	2253347296	RES,CHIP 1/8	RC 0805 1/8 W 4.7Kohm J T	R183 R196	2
76	#N/A	2253456496	RES,CHIP 1/4	RC 1206 1/4 W 560Kohm J T	R803 R830	2
77	E-R-0405-7169	2232491495	RES,CBN 1/4	RD 1/4W 910Kohm P=7.5 J T	R804 R805	2
78	E-R-0405-5991	2253310396	RES,CHIP 1/8	RC 0805 1/8 W 10Kohm J T	R812 R916	2
79	#N/A	2253422096	RES,CHIP 1/4	RC 1206 1/4 W 22 ohm J T	R817 R832	2
80	E-R-0405-3443	2233447995	RES,CBN 1/4 S	RD 1/4WS 4.70 J T52 MINI	R901 R902	2

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
81	#N/A	2253310596	RES,CHIP 1/8	RC 0805 1/8 W 1Mohm J T	R909 R920
82	#N/A	2407200991	HOLDER,FUSE	CQ-05T (5mm DIA FUSE)	S802 S803
83	C-FP-0301-0993	2024266703	FRONT BEZEL	ABS 94 HBPS-7604B/C4001	1F01
84	M-MS-0808-9397	2053753701	LED INDIC.-PWR	VA521 PMMA 94HB	1F02
85	PL-FK-0709-0151	2044266102	FUNCTION KEY	VA521 ABS 94HB AL-PLATE	1F03
86	M-MS-0808-9213	2051352000	NAME PLATE	VIEWSONIC LOGO 3 PIN VA521	1F04
87	M-MS-0808-9214	2051352100	NAME PLATE	VIEWSONIC E015-006 3-BIRD LOGO	1F05
88	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1F11
89	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1F12
90	#N/A	2072457300	INSULATOR	MYLAR BLACK 94V0 T=0.5 BOTTOM	1F13
91	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1F15
92	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1F16
93	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1F20
94	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1F21
95	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1F22
96	C-BC-0302-0583	2022262202	CABI BACK	ABS 94HB PANTON BLACK C=4001	2C01
97	M-MS-0808-9215	2051352200	NAME PLATE	VIEWSONIC E015-017	2C02
98	M-BK-0805-0070	2071869400	BRACKET, FIX	METAL PLATE 1.0MM KENSINGTON	2C03
99	M-MS-0808-9216	2106656300	HINGE	VA521 -5° ~ +20° (F.S)	2C20 RA (Interchangeable)
100	M-MS-0808-9216	2106656301	HINGE	VA521 -5° ~ +20° (T.L)	2C20 RB (Interchangeable)
101	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	2C21
102	#N/A	2028258002	STAND	ABS94HBPANTONE BLACK C=4001	5B01
103	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	5B02
104	M-LB-0813-0769	2055613293	LABEL	VIEWSONIC OPEN STAND LABEL-LCD	5B10
105	P-00000286	2011121006	CARTON BOX	VE510S-2 VLCDS27996-2W 040728	6P01
106	M-LB-0813-0986	2055632062	LABEL	VE510S-2 VLCDS27996-2W (M)	6P02
107	M-LB-0813-0855	2055613281	LABEL	ViewSonic VA520 NUMBER STICKER	6P03
108	M-LB-0813-0987	2055636023	LABEL	VE510S-2 VLCDS27996-2W SMALL	6P05
109	M-LB-0813-0530	2055617101	LABEL	10*20 HI-POT TESTED 0K	6P13
110	M-LB-0813-0959	2055613392	LABEL	VSC HIGH VOLTAGE WARNING LABEL	6P14
111	P-FM-0602-0855	2012176900	POLYFOAM	VA521 EPS (L)	6P20
112	P-FM-0602-0856	2012177000	POLYFOAM	VA521 EPS (R)	6P21
113	M-LB-0830-0713	2055131835	LABEL	VE510S-2 VLCDS27996-2W 040728	6P50
114	M-LB-0813-0528	2055103400	LABEL	JK0936F WEN	6P52
115	M-MS-0808-0027	2013150901	POLYETHY BAG	700LX600WX0.03mm PE-LD ADD>PE	6P60
116	A-CD-VE510S-2	2438501147	CD-OWNER GUIDE	VE510S-2 WIZARD DATA:20040205	6P80
117	M-MS-0808-9407	2002310387	GUARANT CARD	VIEWSONIC VE510S-2 QSG	6P84
118	M-MS-0808-1316	2013222536	POLYETHY BAG	250mmx350mmx0.3 ADD>PE-LD<	6P85
119	#N/A	2072260600	HEAT SINK	AL 72*20*T1.5MM	9H01
120	#N/A	2336310613	CAP,MINI ELE 105°C	EC 10u/ 16V 4*7 P=2.5 T	C117
121	#N/A	2336310713	CAP,MINI ELE 105°C	EC 100u/ 16V 6.3*7 P=2.5 T	C156
122	#N/A	2357568608	EC HI-RIPPLE 105C 400V	EC 68u/400V 16*32 P=7.5 S	C805
123	#N/A	2297427212	CAP,PPP	PPN 2700P/250V P=10.0 K K	C806
124	E-C-0404-2272	2283110291	CAP,CER	CK45B 1000.000PF 500V K T	C808
125	E-C-0404-5329	2349110396	CAP,CHIP 125°C	CS 1206/X7R/50V 0.01u K T	C809
126	E-C-0404-1838	2333610691	CAP,ELE 105°C	EC 10u/ 50V 5*11 P=5.0 T	C811
127	#N/A	2287147212	CAP,CER	CK45E 4700.000PF 250VA M KC	C823
128	E-C-0404-4212	2347410596	CAP,CHIP 85°C	CS 0805/Y5V/50V 1.0u Z T	C902
129	#N/A	2347427396	CAP,CHIP 85°C	CS 0805/Y5V/50V 0.027u Z T	C905
130	#N/A	2342133196	CAP,CHIP 125°C	CS 0805/COG/50V 330p J T	C906
131	#N/A	2342127096	CAP,CHIP 125°C	CS 0805/COG/50V 27p J T	C907
132	#N/A	2347647596	CAP,CHIP 85°C	CS 0805/Y5V/16V 4.7u Z T	C908
133	#N/A	2347110396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.01u K T	C910
134	#N/A	2275450901	CAP,CER	TC 5P/3KV SL P=7.5 J C	C911
135	#N/A	2347133296	CAP,CHIP 125°C	CS 0805/X7R/50V 3300p K T	C912
136	#N/A	2347122296	CAP,CHIP 125°C	CS 0805/X7R/50V 2200P K T	C913
137	#N/A	2347115396	CAP,CHIP 125°C	CS 0805/X7R/50V 0.015u K T	C917
138	M-MS-0808-6352	2363703800	LED	LED 3f GRN/YEL	D701
139	E-D-0403-2801	2362900495	TRANSIENT VOLTAGE SUPPRESSOR	P6K91A DO-15 PEC	D805 RA
140	E-D-0403-2802	2362900995	TRANSIENT VOLTAGE SUPPRESSOR	P6KE91A DO-15 WILLAS	D805 RB
141	#N/A	2363231995	DIODE,RECT	UF4007 PEC	D806 RA
142	#N/A	2363223195	DIODE,RECT	UF4007 GS	D806 RB
143	E-D-0403-1496	2363221495	DIODE,RECT	UF4005G PEC.	D807 RA
144	#N/A	2363223095	DIODE,RECT	UF4005 GS	D807 RB
145	#N/A	2363517695	DIODE,ZENER	HZ18-2 17.5-18.3V 0.5W HITACHI	D813
146	#N/A	2364600996	DIODE,SWITCH SMD	BAV99 SOT-23 DIODES	D901 RA
147	#N/A	2364601096	DIODE,SWITCH SMD	BAV99 SOT-23 PHILIPS	D901 RB
148	#N/A	2363516895	DIODE,ZENER	HZ6B-2 HITACHI	D906
149	E-FS-0410-0009	2213125207	FUSE	FUSE 2.5A/250V 21502.5 LITTEL	F801 RA
150	E-FS-0410-0102	2213125211	FUSE	FUSE 2.5A/250V SG501302.5 PICO	F801 RB
151	E-IC-0401-4046	2365930996	IC,DIGITAL SMD	RTD2013 PQFP128 Realtek	I101
152	E-IC-0450-0041	2365929996	IC,DIGITAL SMD	MTV312M64-AJ PLCC44 MYSON	I104
153	E-IC-0401-2269	2365915896	IC,DIGITAL SMD	24LC16B/SN MICROCHIP SO08	I105 RA
154	#N/A	2365100996	IC,MEMORY	AT24C16AN-10SI-2.7 SOIC8 ATMEL	I105 RB
155	#N/A	2365812696	IC,LINEAR(SMD)	CM2860K1M223 SOT-223 CHAMPION	I106 RA
156	#N/A	2365813196	IC,LINEAR(SMD)	AME8805DEGT SOT-223 AME	I106 RB
157	#N/A	2365330300	IC,LINEAR	SG6841D DIP-8 SG	I801
158	E-PC-0411-0083	2362401800	PHOTO COUPLR	TLP621(D4-GR-LF2) TOSHIBA	I802
159	#N/A	2365330200	IC,LINEAR	OZ9RRAD PDIP-8 MICRO	I901
160	E-Q-0402-7030	2360608596	FET,N-CH(SMD)	AP9960M SO-8 APEC	I902 RA

Item	ViewSonic P/N	Ref. P/N	Description	Location	Q'ty
161	E-Q-0402-7031	2360608696	FET,N-CH(SMD)	AO4826 SO-8 AO	I902 RB
162	M-WR-0828-0460	2428106125	JUMPER	0.6f 12.50MM	J804
163	#N/A	2233410095	RES,CBN 1/4 S	RD 1/4WS 10.00 J T52 MINI	J805
164	M-WR-0828-0451	2428106150	JUMPER	0.6f 15.00MM	J905
165	M-MS-0808-9218	2434410300	AL SHIELDING TAPE	W25*L30mm*T0.06 (AL)	K901
166	#N/A	2371118301	COIL,CHOKE	18mH 0.32mm*90TS UU-10.5	L805
167	#N/A	2371150901	COIL,CHOKE	SuH 0.5mm*19Ts R3*15 I=2.0A	L807
168	#N/A	2404301112	CONNECTOR	JST PH 13P SIDE P=2.0 OR EQUAL	P101
169	M-MS-0808-6355	2404301107	CONNECTOR	JST PH 8P SIDE P=2.0 OR EQUAL	P104
170	#N/A	2404371008	CONNECTOR	JST PH 9P TOP P=2.0 OR EQUAL	P105
171	#N/A	2407630250	SOCKET,SMD	6240-50-OR5P 0.5*50P KYOCERA	P107 RA
172	#N/A	2407630350	SOCKET,SMD	2206BL11250RLP 0.5*50P FRANCON	P107 RB
173	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	P701
174	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P H/B 1007#26 L=140/70mm	P801
175	A-PC-0106-0121	2427130046	POWER CORD	USA WALL 1.83M BLACK	P951
176	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	P961
177	M-FC-0809-0794	2420309001	FFC CABLE	FFC 50P*0.5*L90mm	P981
178	#N/A	2360501396	FET,P-CH SMD	AP2305N SOT-23 APEC	Q104 RA
179	#N/A	2360501296	FET,P-CH SMD	AO3411 SOT-23 ALPHA	Q104 RB
180	#N/A	2361610600	FET,N-CH	PHX4NQ60E TO-220AB PHILIPS	Q801 RA
181	#N/A	2361610700	FET,N-CH	SSS4N60B TO-220F FAIRCHILD	Q801 RB
182	#N/A	2251290916	RES,CHIP 1/10	RC 0603 1/10W 9.09Kohm F T	R142
183	#N/A	2251233216	RES,CHIP 1/10	RC 0603 1/10W 3.32Kohm F T	R148
184	E-R-0405-7000	2253222196	RES,CHIP 1/10W	RC 0603 1/10W 220 ohm J T	R182
185	E-R-0405-6605	2253227296	RES,CHIP 1/10W	RC 0603 1/10W 2.7Kohm J T	R191
186	E-TH-0416-0042	2229201212	THERMISTOR,PTH	SCK-103 10+/-20% 3A THINKING	R802
187	#N/A	2232656395	RES,CBN 1/2	RD 1/2W 56Kohm J T52	R806
188	#N/A	2251426126	RES,CHIP 1/4	RC 1206 1/4 W 26.1Kohm F T	R808
189	#N/A	2253447096	RES,CHIP 1/4	RC 1206 1/4 W 47ohm J T	R809
190	E-R-0405-5990	2253310296	RES,CHIP 1/8	RC 0805 1/8 W 1Kohm J T	R811
191	#N/A	2253412396	RES,CHIP 1/4	RC 1206 1/4 W 12Kohm J T	R819
192	#N/A	2251322016	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm F T	R820
193	#N/A	2251310006	RES,CHIP 1/8	RC 0805 1/8 W 100 ohm F T	R821
194	#N/A	2251327416	RES,CHIP 1/8	RC 0805 1/8 W 2.74Kohm F T	R822
195	#N/A	2251320026	RES,CHIP 1/8	RC 0805 1/8 W 20Kohm F T	R823
196	#N/A	2232412295	RES,CBN 1/4	RD 1/4W 1.2Kohm P=10.0 J T	R824
197	#N/A	2235647013	RES,MTL 3	RS 3WS 47ohm J P=20.0	R826
198	#N/A	2253410196	RES,CHIP 1/4	RC 1206 1/4 W 100ohm J T	R827
199	#N/A	2251318026	RES,CHIP 1/8	RC 0805 1/8 W 18Kohm F T	R828
200	#N/A	2251343216	RES,CHIP 1/8	RC 0805 1/8 W 4.32Kohm F T	R829
201	#N/A	2253427196	RES,CHIP 1/4	RC 1206 1/4 W 270 ohm J T	R833
202	#N/A	2253351596	RES,CHIP 1/8	RC 0805 1/8 W 5.1Mohm J T	R903
203	E-R-0405-2983	2251382526	RES,CHIP 1/8	RC 0805 1/8W 82.5Kohm F T	R906
204	E-R-0405-7121	2251390926	RES,CHIP 1/8	RC 0805 1/8 W 90.9Kohm F T	R907
205	#N/A	2251310036	RES,CHIP 1/8	RC 0805 1/8 W 100Kohm F T	R908
206	E-R-0405-5997	2253322296	RES,CHIP 1/8	RC 0805 1/8 W 2.2Kohm J T	R912
207	E-R-0405-5992	2253310196	RES,CHIP 1/8	RC 0805 1/8 W 100ohm J T	R915
208	#N/A	2242330595	HIGH VOLTAGE RESISTOR	RD 1/2W 3.00M J	R917
209	#N/A	2251349916	RES,CHIP 1/8	RC 0805 1/8W 4.99Kohm F T	R918
210	#N/A	2251341206	RES,CHIP 1/8	RC 0805 1/8W 412 ohm F T	R921
211	#N/A	2251340206	RES,CHIP 1/8	RC 0805 1/8W 402 ohm F T	R924
212	#N/A	2259222008	RES,CHIP NETWORKS	8P4R 1/16W 22 ohm J P=0.8	RN6
213	#N/A	2407413100	SOCKET (AC INLET)	0711-2-P10-9 INALWAYS	S801 RA
214	#N/A	2407413300	SOCKET (AC INLET)	SC-8R-F15A9 SUPERCOM	S801 RB
215	#N/A	2374228004	XFORMER,POWR	ER-28 2UEW 0.27*2 32Ts 1.8mH	T801
216	#N/A	2374300700	XFORMER INVERTER	EEL-19 16/2080Ts 0.4/0.045mm	T901
217	#N/A	2202518300	PCB MULTILAYER	VA521(A) M/B FR4*2 100*82	U101
218	#N/A	2202127100	PC BOARD	VA521 KEY/B FR1 115*31	U701
219	B-MB-0201-0851	2202126901	PC BOARD	JT166W18 P/B CEM1 160*100 2.01	U801
220	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	V901
221	E-X-0415-0119	2369103601	XTAL,OSC	12.000MHZ/49US	X101
222	E-X-0415-0112	2369103901	XTAL,OSC	24.576MHZ/49US	X102

8. Exploded Diagram And Spare Parts List





EXPLODED PARTS LIST (VA521-1)

ViewSonic Model Number: VLCD527996

Rev: 1b

Item	ViewSonic P/N	Ref.P/N	Description		Q'TY	Location	Remark
1	C-FP-0301-0993	2024266703	FRONT BEZEL ASS'Y	ABS 94HB PS-7604B/C4001	1	1F01	
2	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1	1F11	
3	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1	1F12	
4	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	4	1F14	
5	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1	1F15	
6	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1	1F16	
7	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F17	
8	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F18	
9	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F19	
10	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1	1F20	
11	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1	1F21	
12	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1	1F22	
13	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F23	
14	C-BC-0302-0583	2022262202	CABI BACK	ABS 94HB PANTONE BLACK C=4001	1	2C01	
15	M-MS-0808-9215	2051352200	NAME PLATE	VIEWSONIC E015-017	1	2C02	
16.1	M-MS-0808-9216	2106656300	HINGE	VA521 -5'~+20' (F.S)	1	2C20	RA (Interchangeable)
16.2	M-MS-0808-9216	2106656301	HINGE	VA521 -5'~+20' (T.L)	1	2C20	RB (Interchangeable)
17	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	1	2C21	
18	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	6	2C22	
19	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2	2C23	
20	PL-PS-0715-0986	2028258002	STAND	ABS94HB PANTONE BLACK C=4001	1	5B01	
21	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	1	5B02	
22	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER O20*2TMM SQUARE GRAIN	5	5B03	
23	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	2	5B04	
24	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	2	5B05	
25	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	4	5B06	
26	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94VO GY7521	2	5B07	
27	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	1	P701	
28	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P 1007#26 L=140/70 P=2.0	1	P801	
29	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	1	P961	
30	M-FC-0809-0794	2420309001	FFC CABLE	90L*25.5W*0.05T 0.3W*0.5P*50N	1	P981	
31	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	1	V901	

EXPLODED PARTS LIST (VE510b-2)

ViewSonic Model Number: VLCD527996
Rev: 1c

Item	ViewSonic P/N	Ref.P/N	Description		Q'TY	Location	Remark
1	C-FP-0301-0991	2024266704	FRONT BEZEL ASS'Y	ABS 94HB MIDNIGHT GRAY	1	1F01	
2	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1	1F11	
3	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1	1F12	
4	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	4	1F14	
5	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1	1F15	
6	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1	1F16	
7	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F17	
8	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F18	
9	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F19	
10	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1	1F20	
11	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1	1F21	
12	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1	1F22	
13	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F23	
14	C-BC-0302-0597	2022262203	CABI BACK	ABS 94HB MIDNIGHT GRAY	1	2C01	
15	M-MS-0808-9396	2051352202	NAME PLATE	NAME PLATE VIEWSONIC E015-027	1	2C02	
16.1	M-MS-0808-9216	2106656300	HINGE	VA521 -5'~+20' (F.S)	1	2C20	RA (Interchangeable)
16.2	M-MS-0808-9216	2106656301	HINGE	VA521 -5'~+20' (T.L)	1	2C20	RB (Interchangeable)
17	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	1	2C21	
18	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	6	2C22	
19	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2	2C23	
20	PL-PS-0715-0992	2028258003	STAND	ABS 94HB MIDNIGHT GRAY	1	5B01	
21	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	1	5B02	
22	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER 020*2TMM SQUARE GRAIN	5	5B03	
23	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	2	5B04	
24	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	2	5B05	
25	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	4	5B06	
26	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94VO GY7521	2	5B07	
27	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	1	P701	
28	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P 1007#26 L=140/70 P=2.0	1	P801	
29	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	1	P961	
30	M-FC-0809-0794	2420309001	FFC CABLE	90L*25.5W*0.05T 0.3W*0.5P*50N	1	P981	
31	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	1	V901	

EXPLODED PARTS LIST (VE510s-2)

ViewSonic Model Number: VLCD527996
Rev: 1c

Item	ViewSonic P/N	Ref.P/N	Description		Q'TY	Location	Remark
1	C-FP-0301-0965	2603307566	FRONT BEZEL ASS'Y	ABS 94 HB PS-7604B	1	1F01	
2	M-MS-0808-9212	2071969000	METAL FITTG	SECC T=0.8MM FOR CPT VA521	1	1F11	
3	M-MS-0808-9219	2072456900	INSULATOR	MYLAR BLACK 94V0 T=0.5 POWER	1	1F12	
4	M-SCW-0824-6715	2080002200	SCREW,SPE	L355 M3x6 DH NICKEL-PLATED	4	1F14	
5	M-SCW-0824-6820	2085740062	SCREW,B OTW+	B,OTW+,M4x6	1	1F15	
6	M-MS-0808-9220	2071668700	SHIELD PLATE	SPTE T=0.3MM FOR MAIN BOARD	1	1F16	
7	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F17	
8	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F18	
9	M-SCW-0824-0811	2080003700	SCREW,SPE	1SZZTER001A M3*6L MSWR17/FZMY1	4	1F19	
10	M-MS-0808-9221	2072457000	INSULATOR	MYLAR BLACK 94V0 T=0.5 SIGNAL	1	1F20	
11	M-MS-0808-9222	2071670400	SHIELD PLATE	SPTE T=0.3MM (TOP)	1	1F21	
12	M-MS-0808-9223	2071670500	SHIELD PLATE	SPTE T=0.3MM (DOWN)	1	1F22	
13	M-SCW-0824-6719	2082630062	SCREW	M3X6 P=0.5	1	1F23	
14	C-BC-0302-0583	2022262202	CABI BACK	ABS 94HB PANTONE BLACK C=4001	1	2C01	
15	M-MS-0808-9215	2051352200	NAME PLATE	VIEWSONIC E015-017	1	2C02	
16	M-MS-0808-9216	2106656300	HINGE	VA521 -5'~+20' (F.S)	1	2C20	RA(Interchangeable)
	M-MS-0808-9216	2106656301	HINGE	VA521 -5'~+20' (T.L)	1	2C20	RB(Interchangeable)
17	M-MS-0808-9224	2105251600	SPRING PLATE	VA521 PB-CU T=0.2MM	1	2C21	
18	M-SCW-0824-0285	2084730082	SCREW,BND T+	M3X8(BND T+)	6	2C22	
19	M-SCW-0824-6745	2084740104	SCREW,BND T+	M4X10(BND T+) (BLK)	2	2C23	
20	PL-PS-0715-0986	2028258002	STAND	ABS94HB PANTONE BLACK C=4001	1	5B01	
21	M-MS-0808-9225	2071969200	METAL FITTG	SECC T=1MM STAND	1	5B02	
22	PL-PD-0714-0113	2039819301	FOOT PAD	RUBBER 020*2TMM SQUARE GRAIN	5	5B03	
23	M-SCW-0824-0123	2084740102	SCREW,BND T+	M4X10(BND T+)	2	5B04	
24	M-SCW-0824-0812	2084730062	SCREW,BND T+	M3X6(BND T+)	2	5B05	
25	M-SCW-0824-0440	2085740102	SCREW,B OTW+	SCREW B OTW+ M4X10	4	5B06	
26	M-CV-0830-0281	2027258402	DUST COVER	VA521 ABS 94VO GY7521	2	5B07	
27	M-WR-0828-6626	2427408181	WIRE HARNESS	8P H/B 1061#26 L=180mm P=2.0	1	P701	
28	M-MS-0808-9226	2427409141	WIRE HARNESS	9/3+6P 1007#26 L=140/70 P=2.0	1	P801	
29	A-VIO-0118-0034	2427501174	I/O CABLE	D15/C13 20276(3+6) 1.83M BLK	1	P961	
30	M-FC-0809-0794	2420309001	FFC CABLE	90L*25.5W*0.05T 0.3W*0.5P*50N	1	P981	
31	M-LCD-0826-0223	2212004701	LCD PANEL	CLAA150XG08V CPT	1	V901	

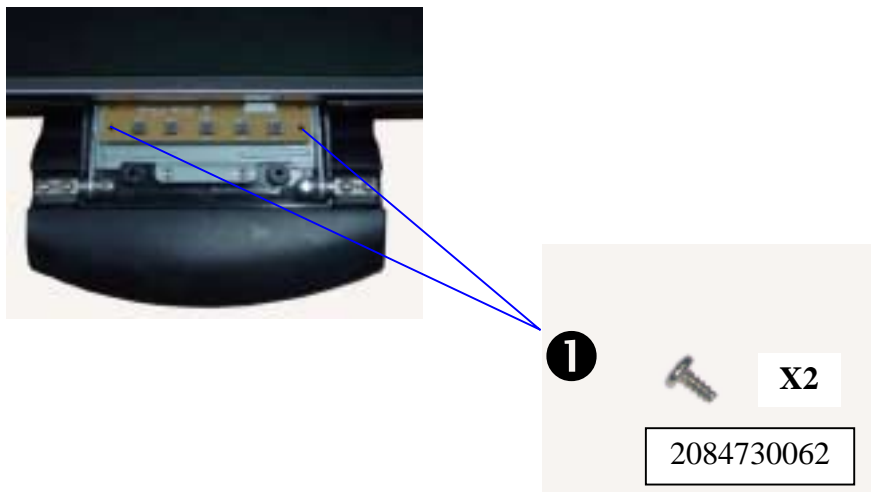
8-3 Procedure of Disassembly

This section provides disassembly procedures for VA521, VE510b/s-2 LCD Monitor. Before you begin any of these procedures, be sure to turn off the power, computer system, and other attached devices; then disconnect the power cable from the electrical outlet. Moreover, when you disassemble the monitor, be sure to put the screws in a safe place and separate them according to grouping.

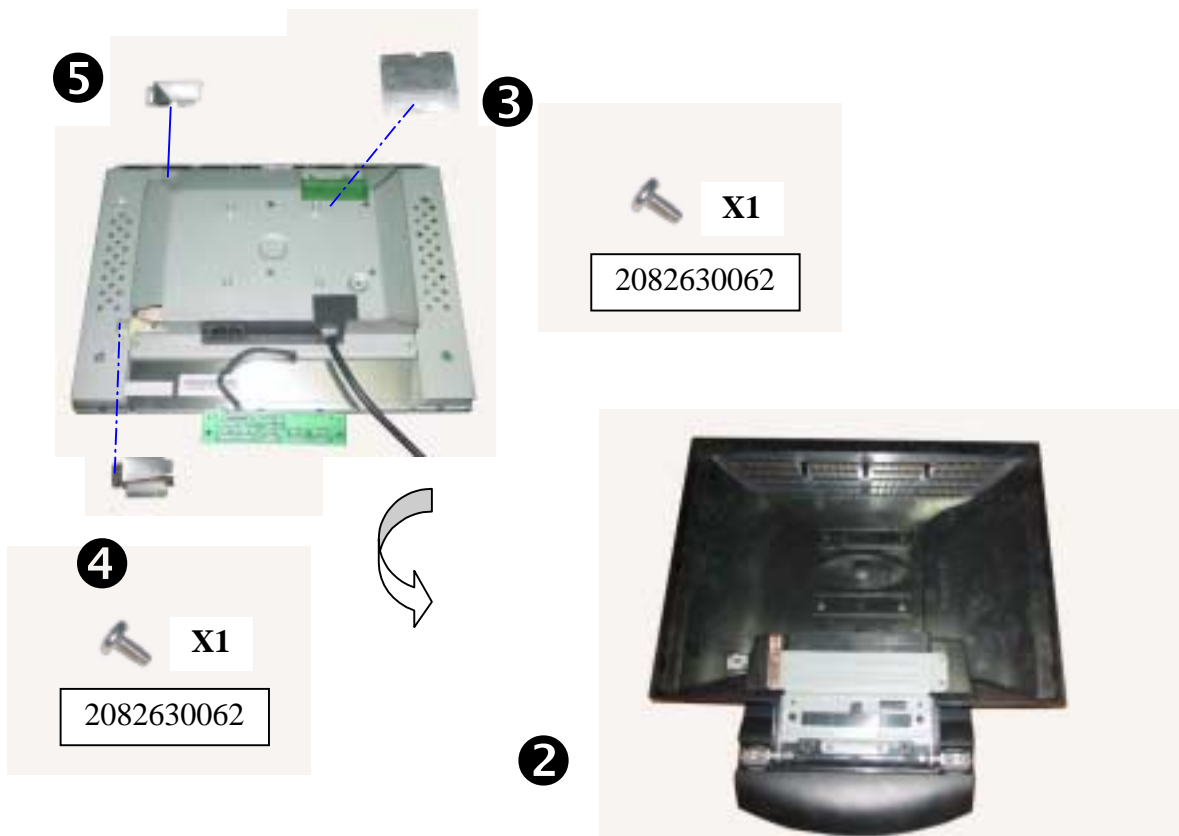
- **Disassembly of Front Cover**



- Disassembly of Rear Cover, Keypad Board and LCD Panel

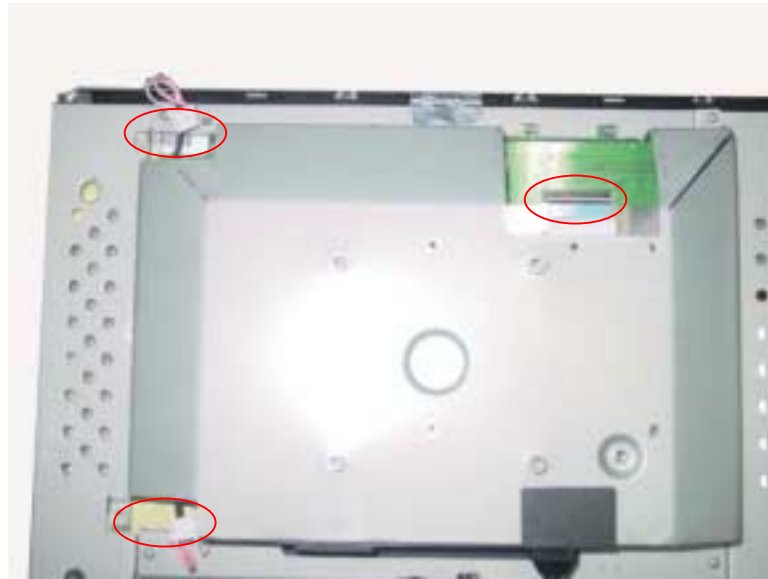


1. Unscrew two screws that secure Keypad Board.

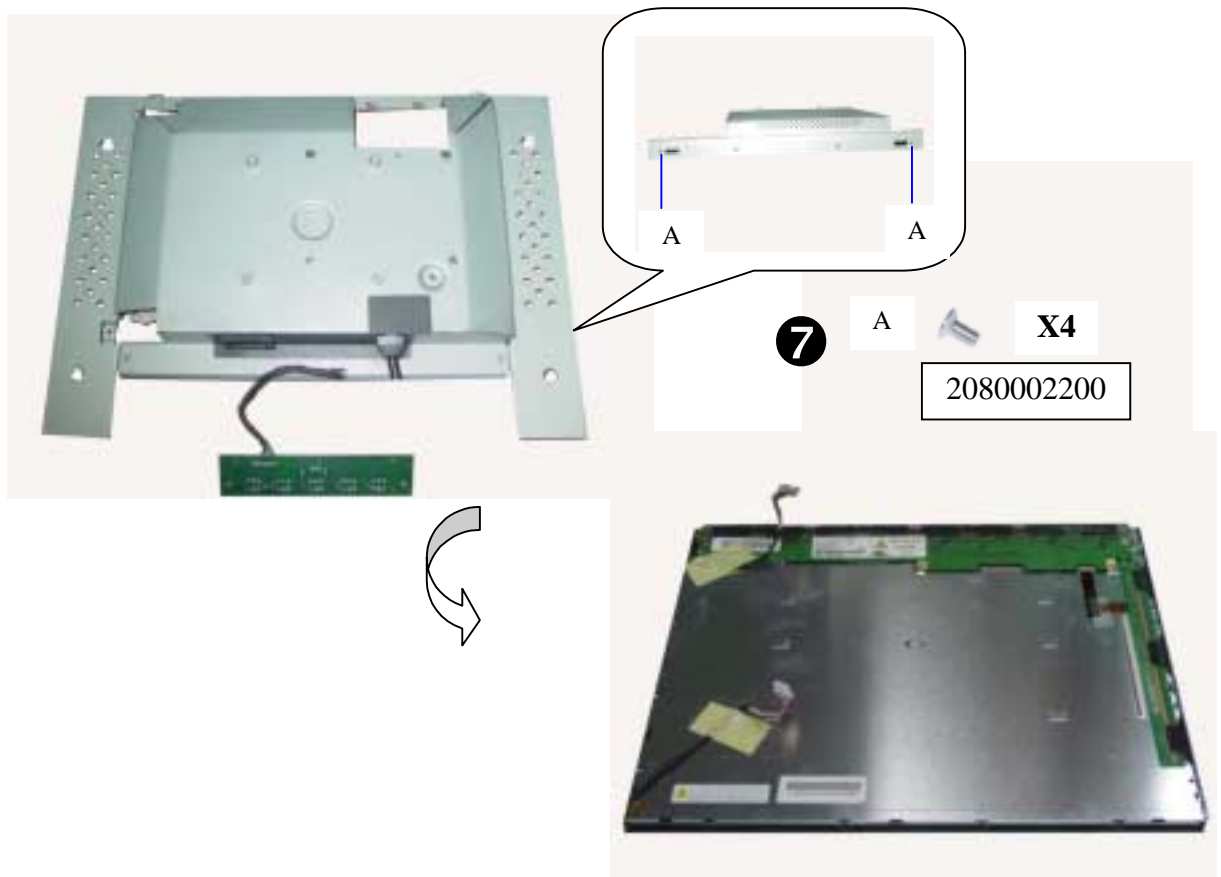


2. Detach Rear Cover and LCD Panel module from the monitor.
3. Unscrew one screw that secure M/B Shielding Plate.
4. Unscrew one screw that secure Inverter down Shielding Plate.
5. Remove Inverter top Shielding Plate.

6

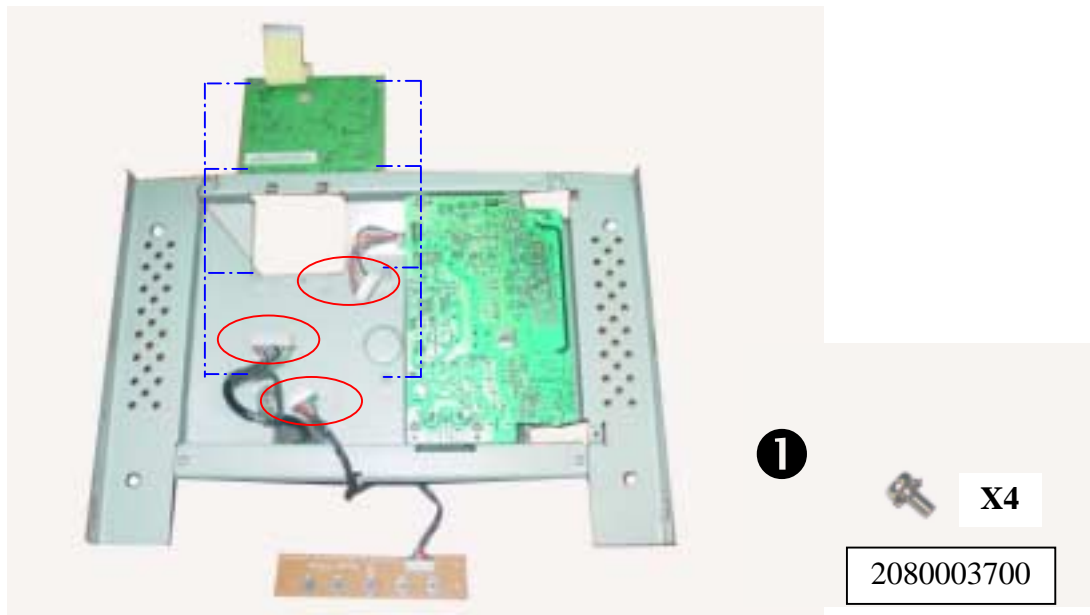


6. Disconnect three connectors to remove Inverter connector and LCD Panel FPC cable.

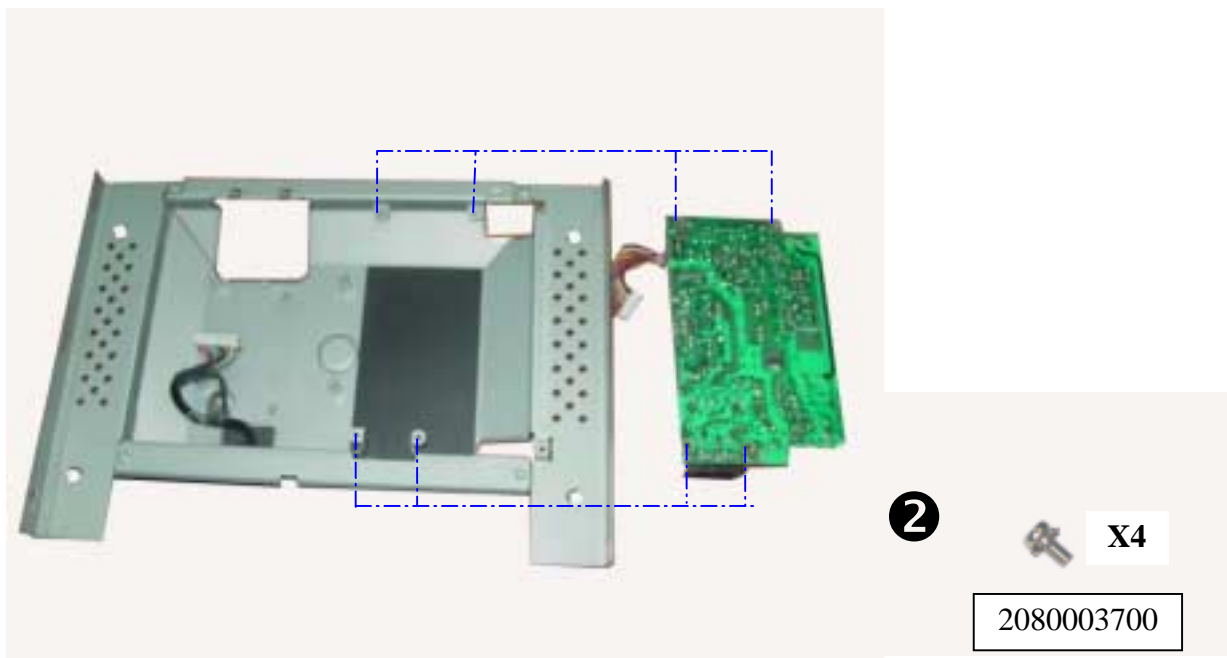


7. Unscrew four screws that secure Metal Fitting and remove LCD Panel from Metal Fitting.

- Disassembly of Main Board, Keypad Board and Power Board



1. Unscrew four screws that secure Main Board and disconnect the wires which are connected to Main Board and remove Main Board.



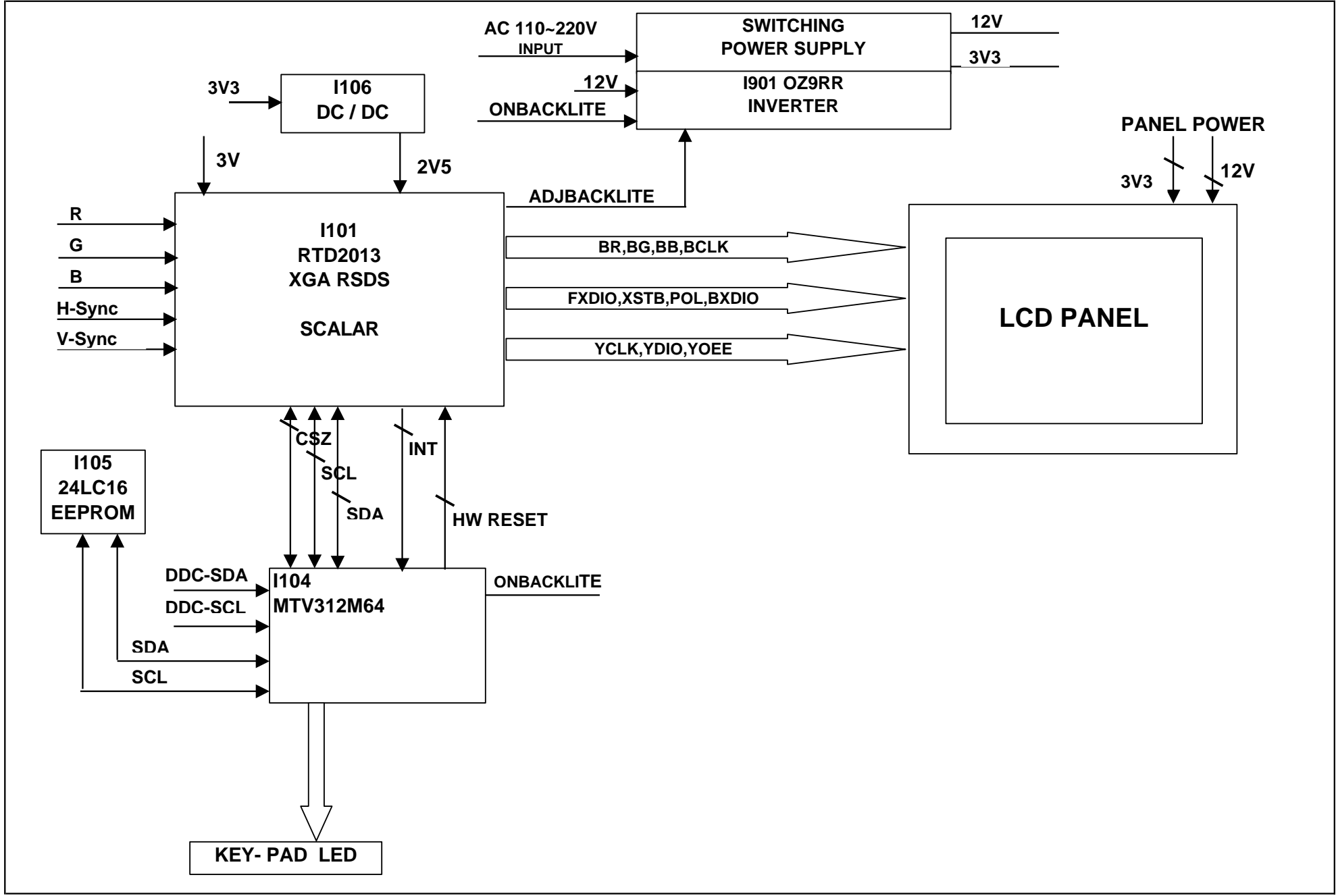
2. Unscrew four screws that secure Power Board to remove Power Board.

- Disassembly of Stand unit from Rear Cover



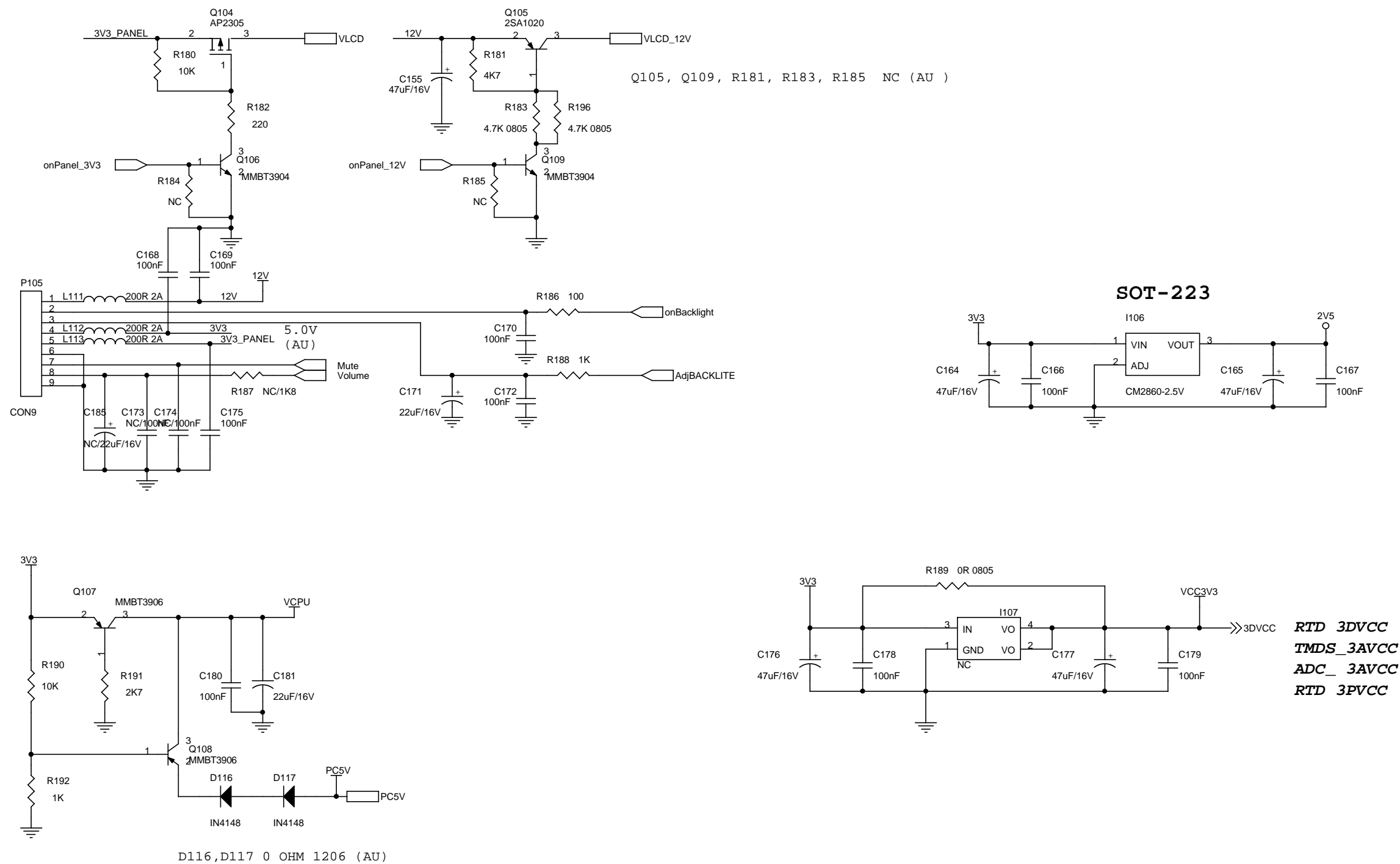
1. Unscrew six screws that secure Stand unit and detach Stand unit from the monitor.

9. Block Diagram

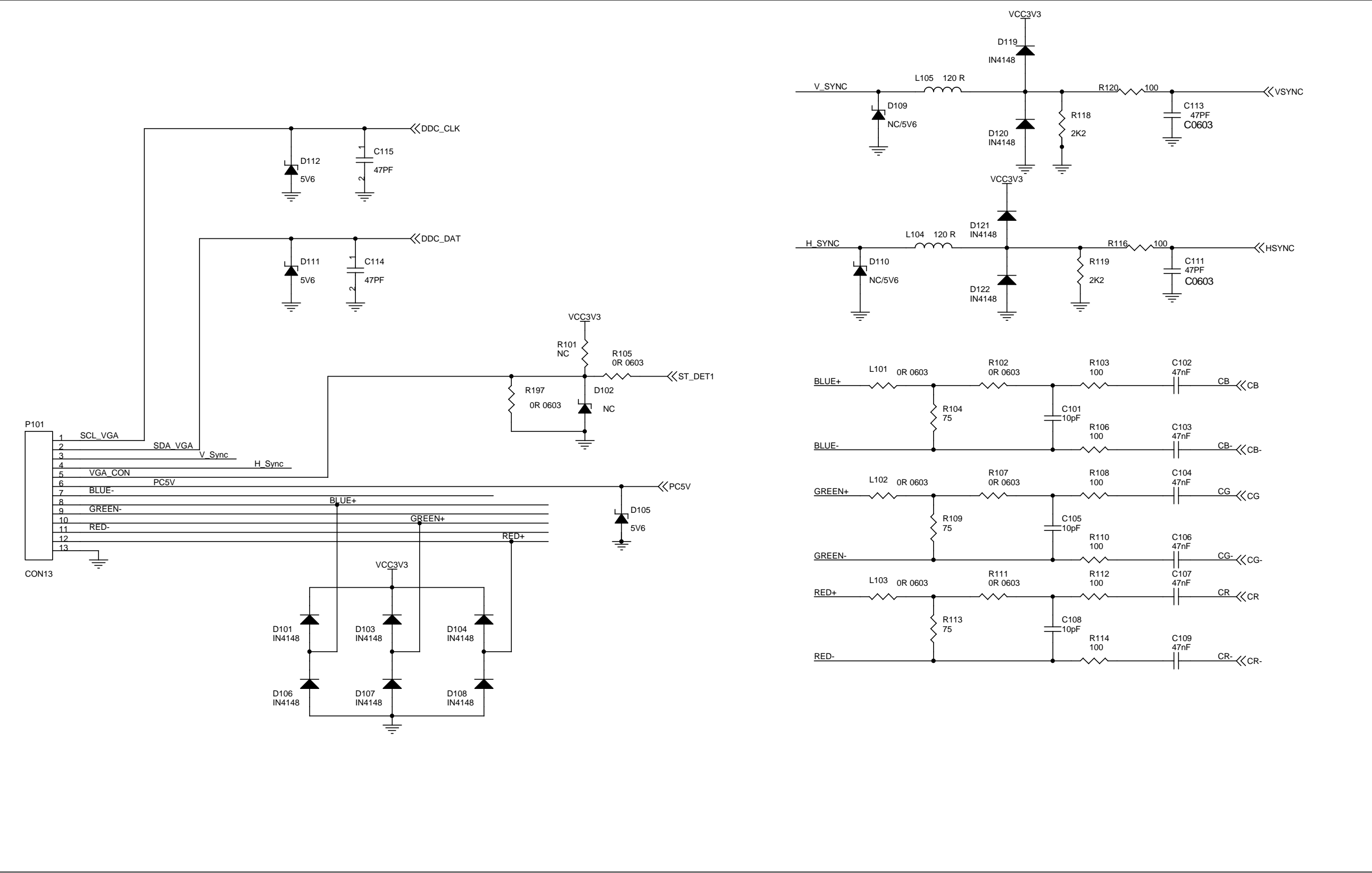


10. Schematic Diagrams

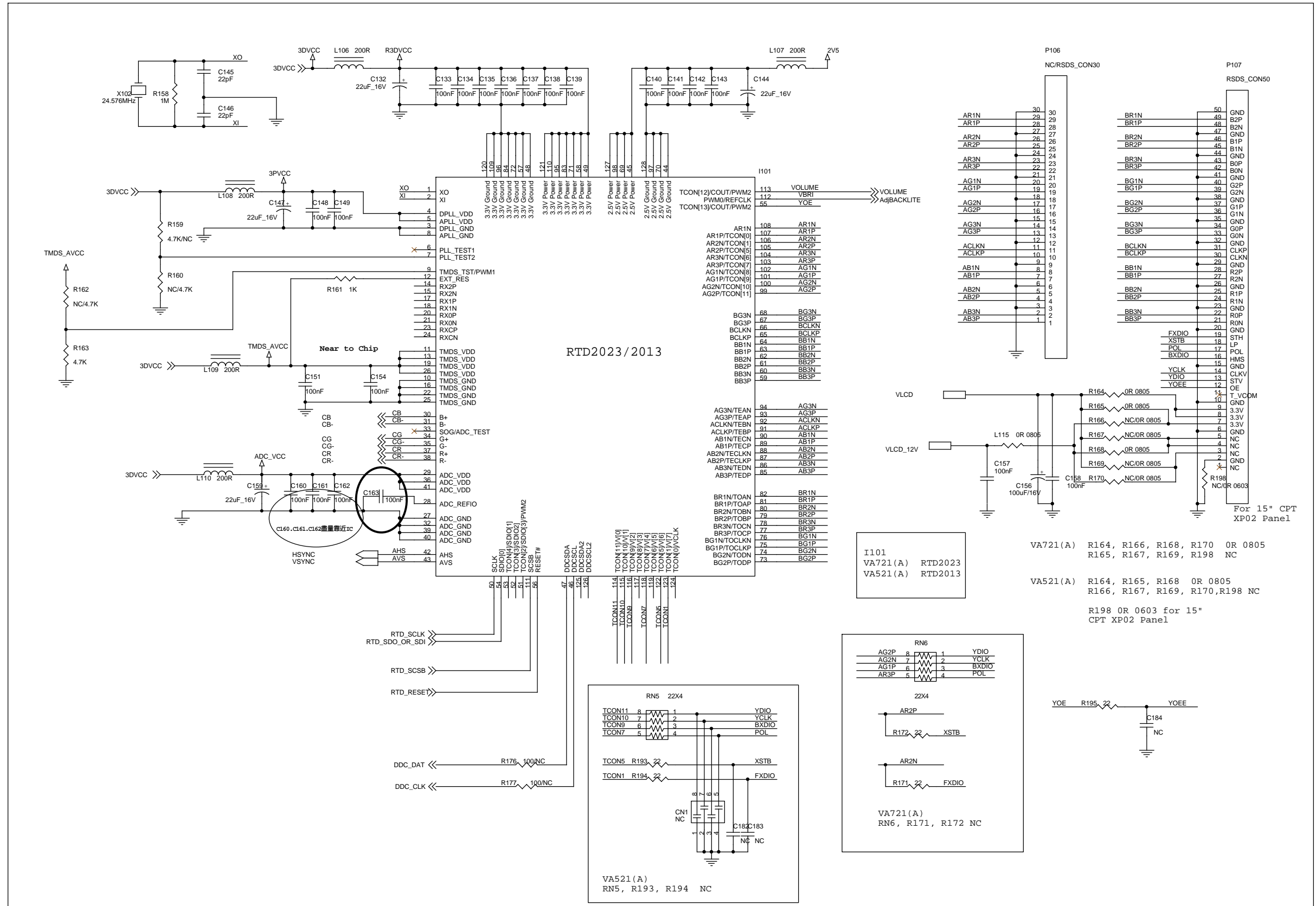
10.1. Power (Realtek Scaler)



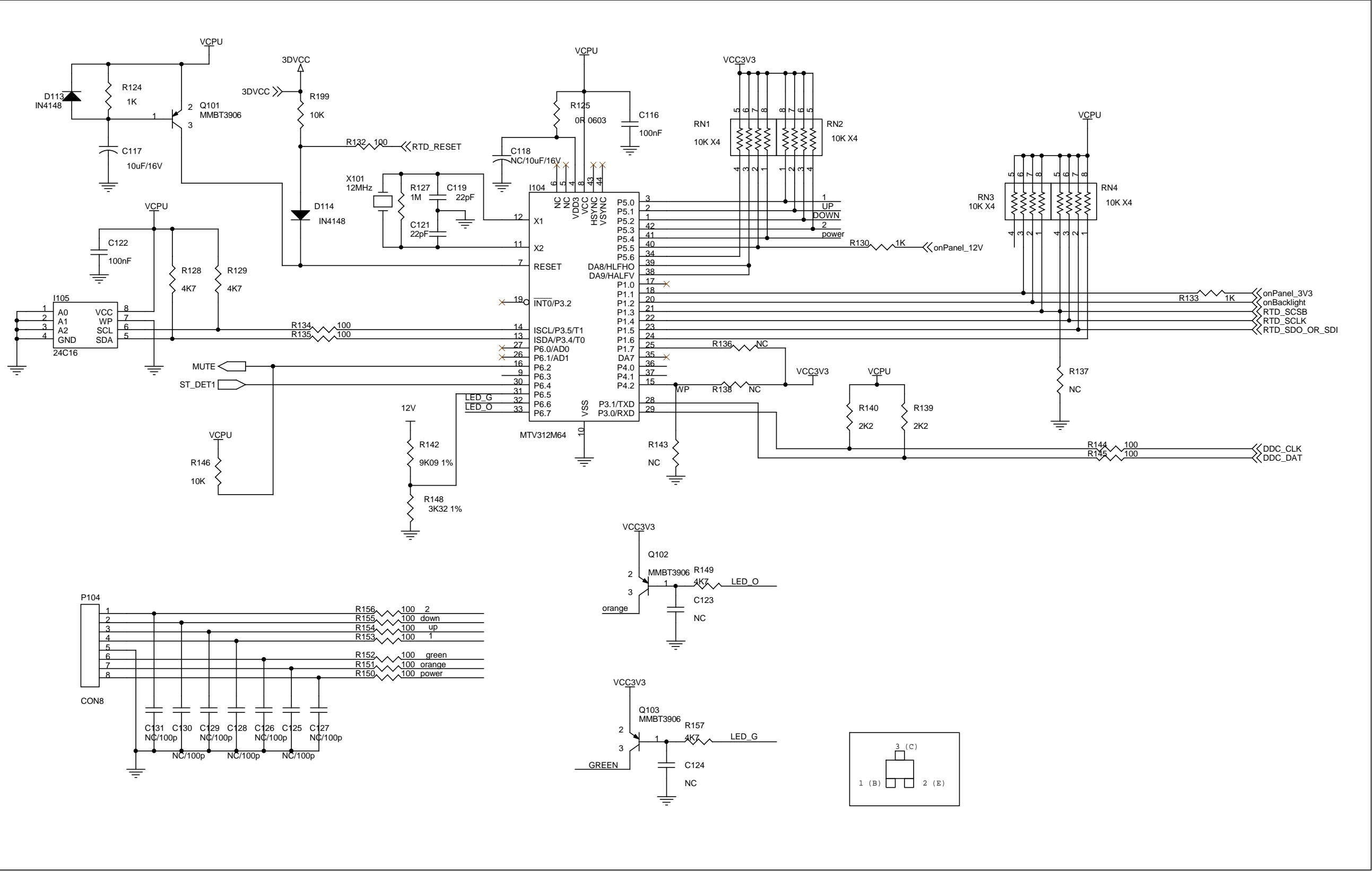
10.2. Input (Realtek Scaler)



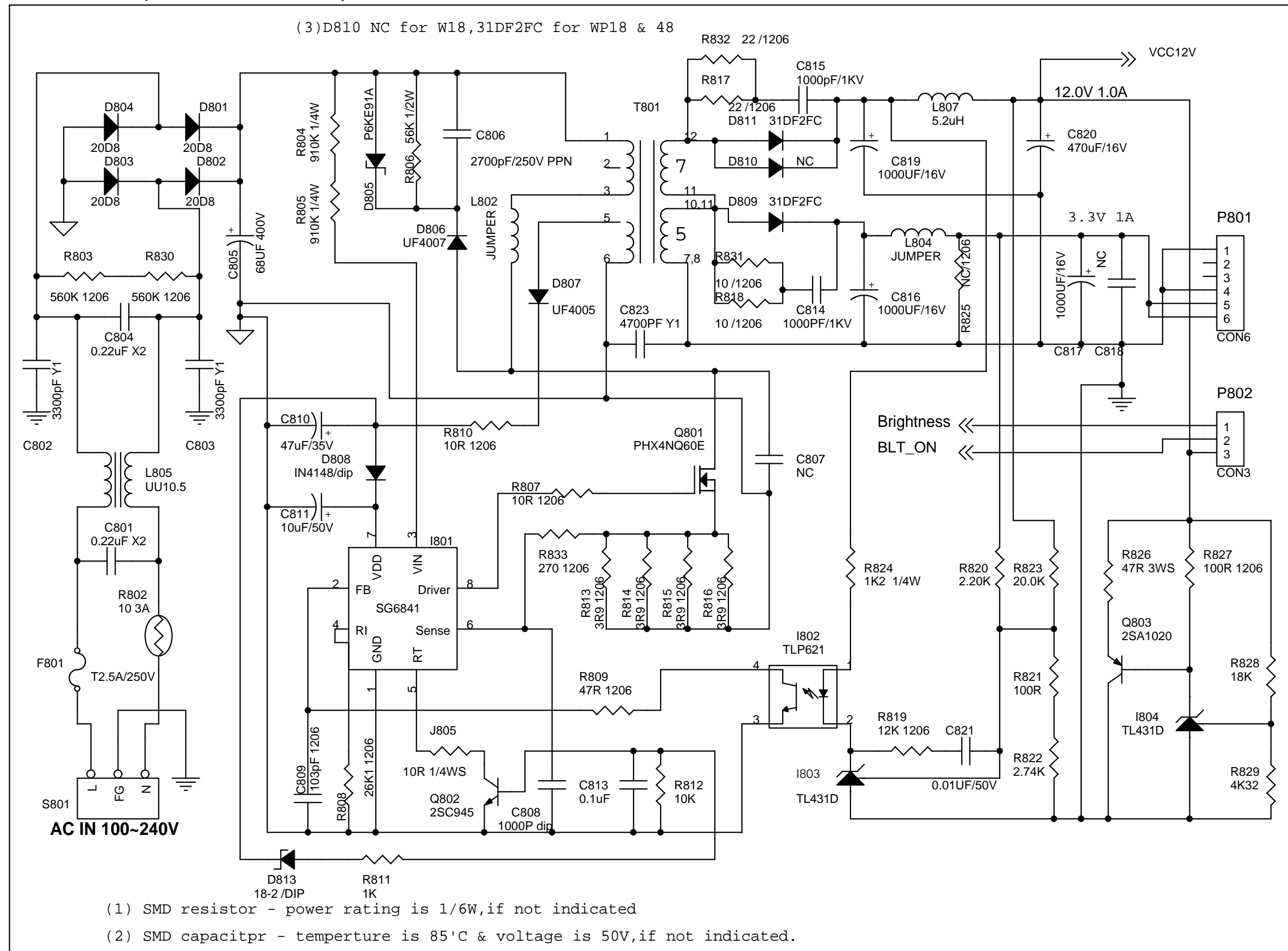
10.3. Scaler (Realtek Scaler)



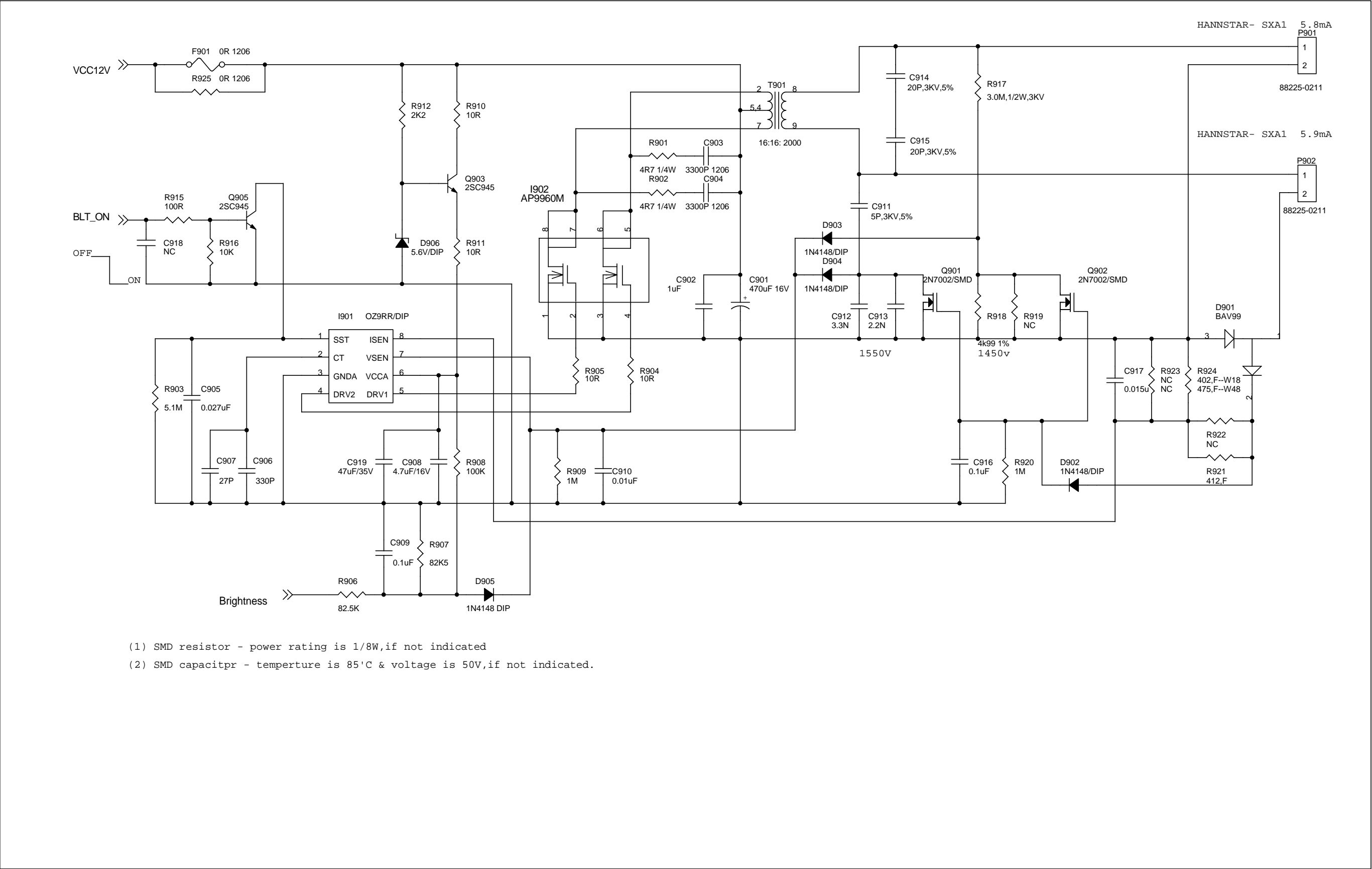
10.5. MCU (Realtek Scaler)



10.6. A-D Power (M-star & Realtek Scaler)

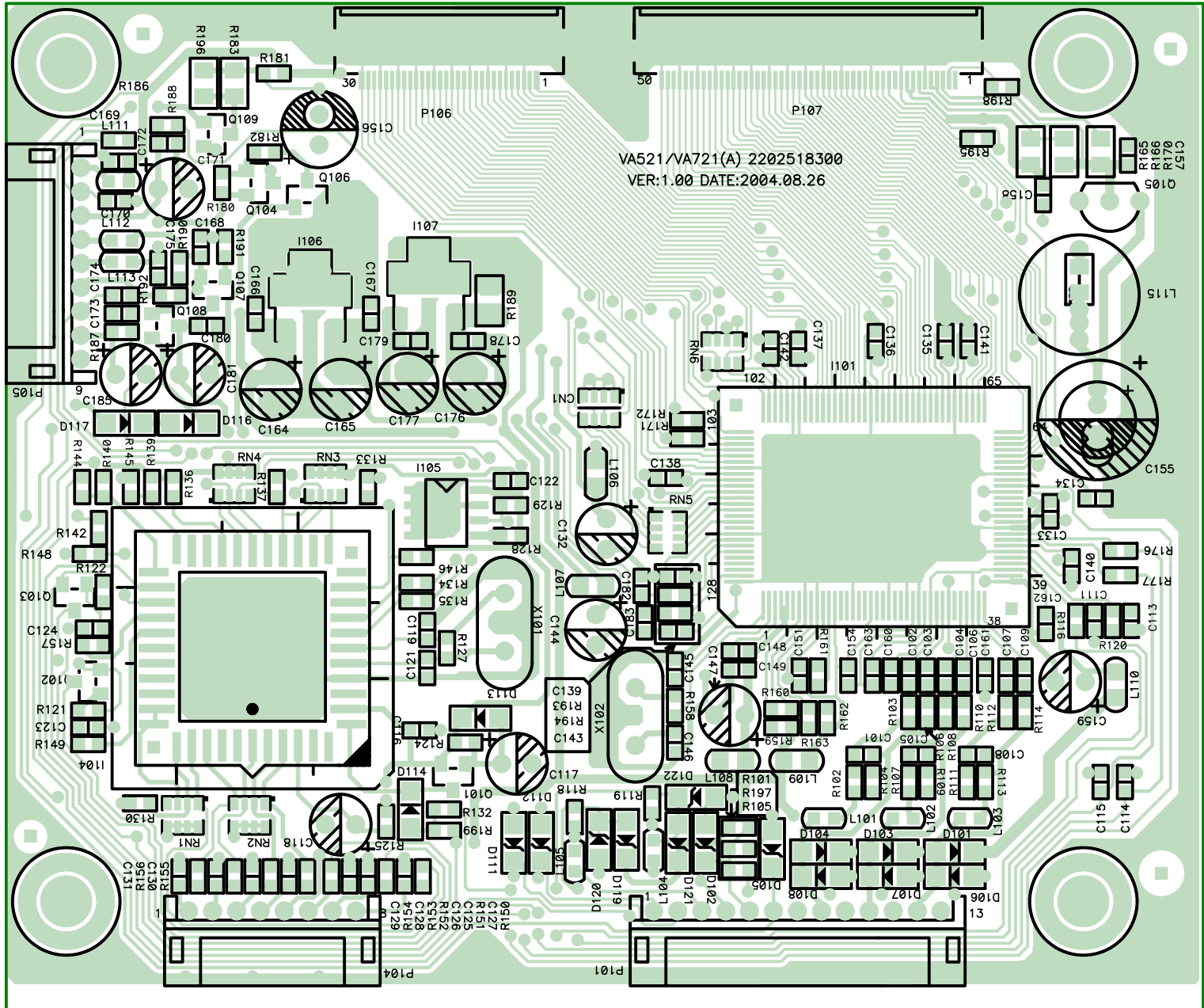


10.7. Inverter (M-star & Realtek Scaler)

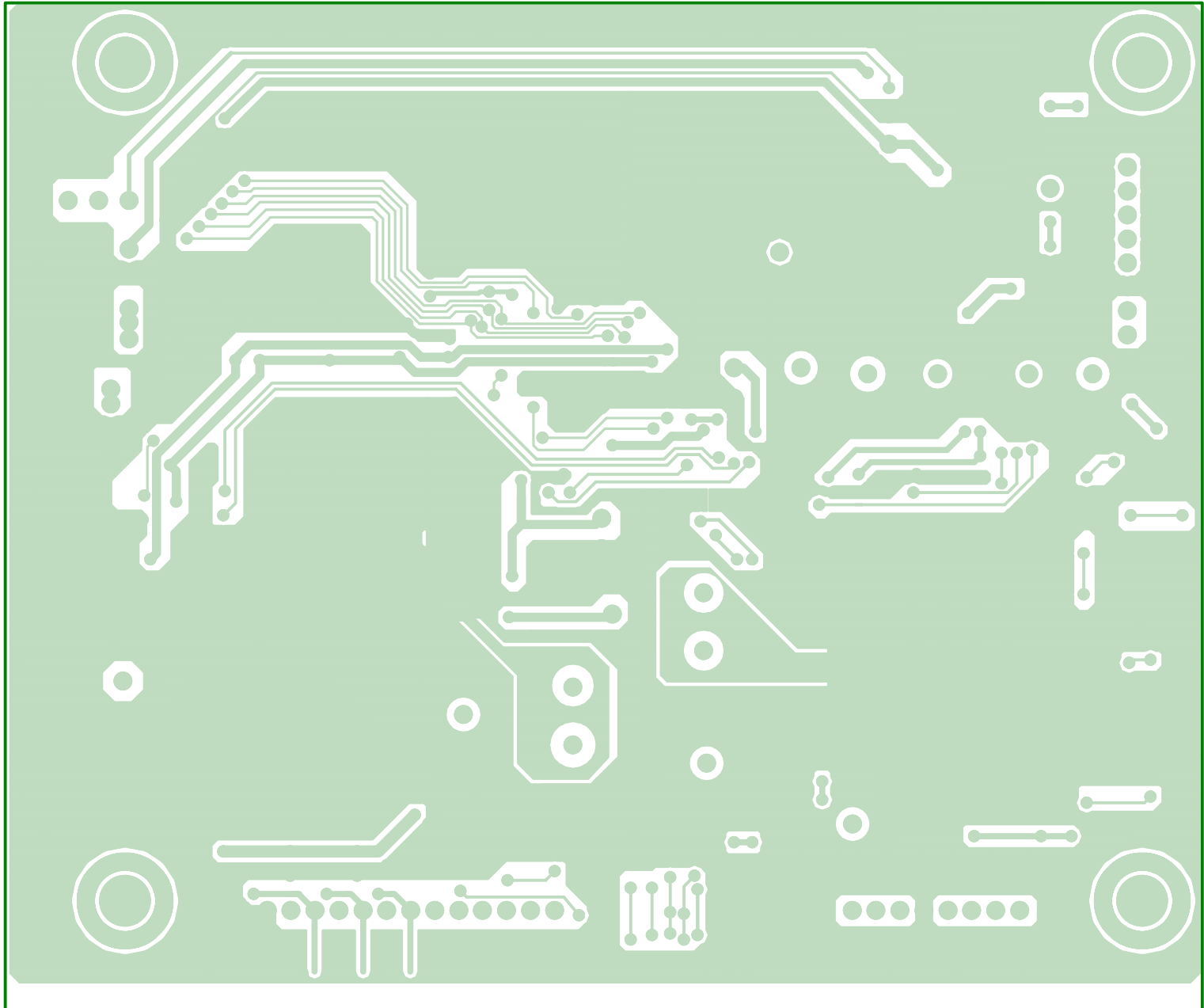


11. PCB Layout Diagrams

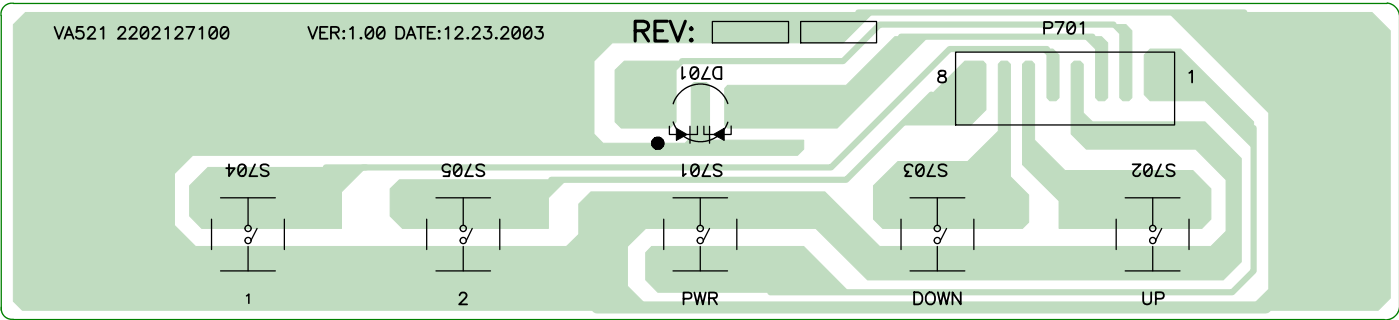
11-1 MAIN PCB TOP VIEW



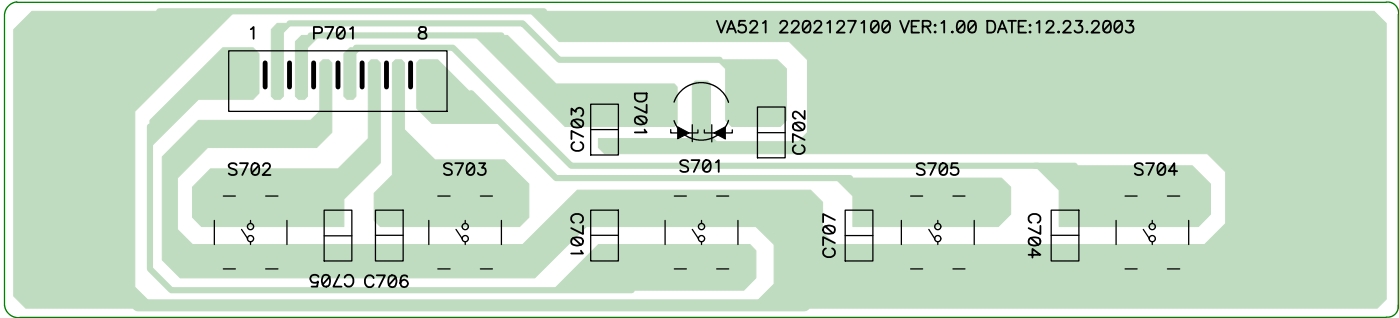
11-2 MAIN PCB BOTTOM VIEW



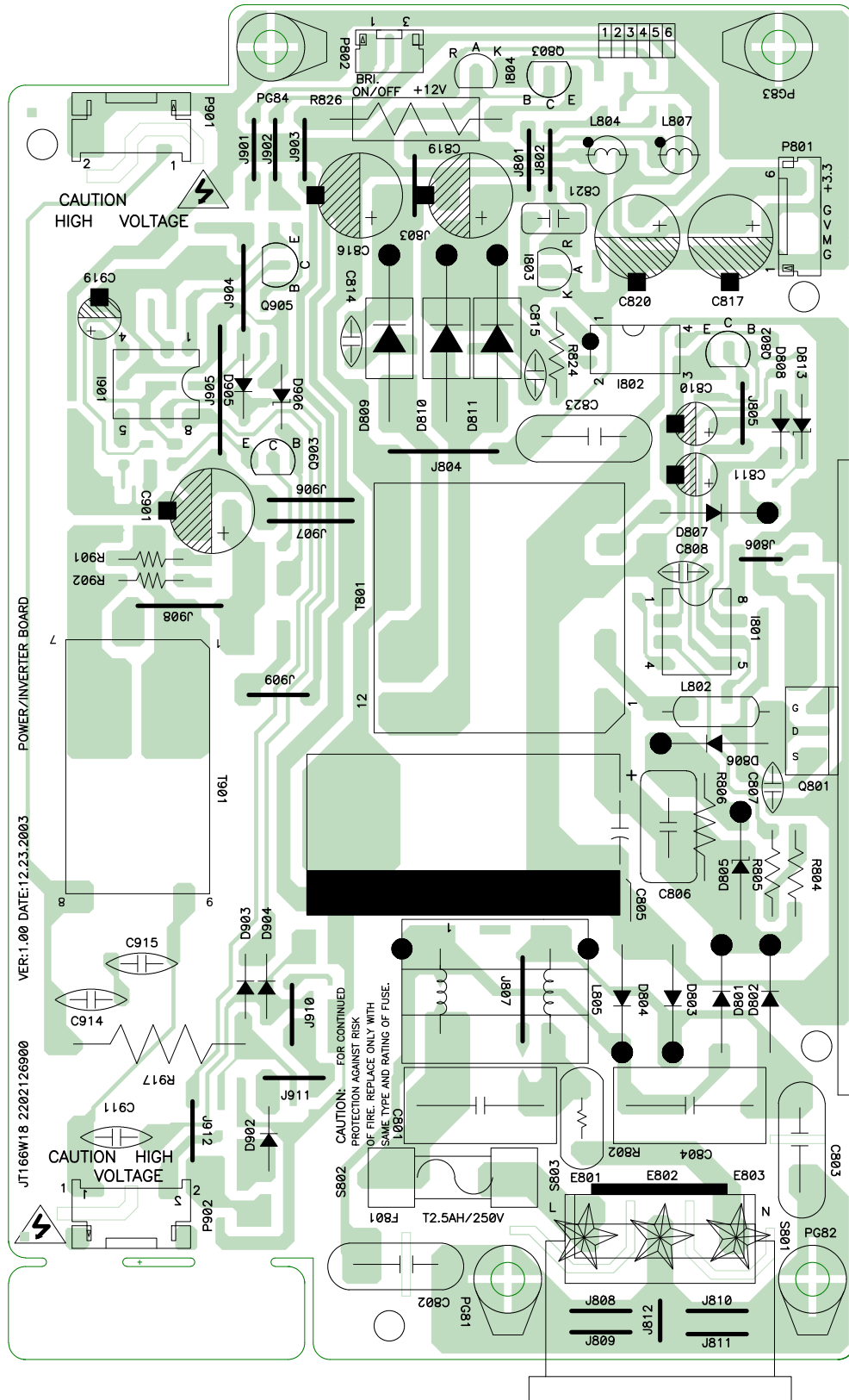
11-3 CON PCB TOP VIEW



11-4 CON PCB BOTTOM VIEW



11-5 POWER PCB TOP VIEW



ViewSonic Corporation



Reader's Response

Dear Readers:

Thank you in advance for your feedback on our Service Manual, which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic Corporation.

Assessment

A. What do you think about the content after reading **VA521/VE510b/s-2** Service Manual?

<i>Unit</i>	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Bad</i>
1. Precautions And Safety Notices				
2. Specification				
3. Front Panel Function Control Description				
4. Circuit Description				
5. Adjusting Procedure				
6. Trouble Shooting Flow Chart				
7. Recommended Spare Parts List				
8. Exploded Diagram and Spare Parts List				
9. Block Diagram				
10. Schematic Diagrams				
11. PCB Layout Diagrams				

B. Are you satisfied with the **VA521/VE510b/s-2** service manual?

<i>Item</i>	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Bad</i>
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any other opinion or suggestion about this service manual?

Reader's basic data:

Name:		Title:	
Company:			
Add.:			
Tel:		Fax:	
E-mail:			

After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-839-7943. You may also e-mail any suggestions to the Director, Quality Systems & Processes (marc.maupin@viewsonic.com)